VOLUME II TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1961

No. 304

CONTINENTAL ORE COMPANY, ET AL., PETITIONERS,

vs.

UNION CARBIDE AND CARBON CORPORATION, ET AL.

(1)

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

PETITION FOR CERTIORARI FILED AUGUST 11, 1961 CERTIORARI GRANTED OCTOBER 23, 1961

United States Court of Appeals

for the Rinth Circuit

CONTINENTAL ORE COMPANY, a Partnership, and HENRY J. LEIR, ERNA D. LEIR, LINA SCHLOSS, as Individuals and as partners under the trade name and style of CON-TINENTAL ORE COMPANY,

Appellants,

VS.

UNION CARBIDE AND CARBON CORPORA-TION; UNITED STATES VANADIUM CORPORATION; ELECTRO METALLUR-GICAL COMPANY; ELECTRA METAL-LURGICAL SALES CORPORATION; EL-ECTRO METALLURGICAL COMPANY OF CANADA, LIMITED; VANADIUM CORPORATION OF AMERICA,

Appellees.

Transcript of Record

In Seven Volumes VOLUME II. (Pages 417 to 840, inclusive)

Appeal from the United States District Court for the Northern District of California, Southern Division

Mr. Archer: Your Honor, I do not know what procedure you wish to follow, whether you want this taken off the deposition or to remain with the deposition, but I would like to offer in evidence as defendants' next in order, first a letter-agreement dated May 11, 1943, between Union Mines Development Corporation, by Mr. J. R. Van Fleet, president, signed by United States of America by K. D. Nichols, Lieutenant Colonel, Corps of Engineers, Contracting Officer, with the Exploration and Development Contract No. W-7405 Eng-78, signed by K. D. Nichols, or signed by the United States of America, K. D. Nichols, Contracting Officer, and Union Mines Development Corporation, by J. R. Van Fleet, President. And the date of that is the 17th day of April, 1944, effective as of the 11th day of May, 1943.

Mr. Alioto: Have you identified the Union Mines Development Company, as to what that is?

Mr. Archer: I think Mr. Burwell has already testified to that.

The Witness: Yes, I can identify the Union Mines Development Corporation as a company organized by the Union Carbide & Carbon Corporation, and its officers were Mr. Van Fleet, president and director, I was vice-president and director.

- Q. (By Mr. Archer): And it operated on the Colorado Plateau, did it not? [404]
 - A. No; it operated all over the world.
 - Q. And that included the Colorado Plateau?
 - A. That is right.

Mr. Archer: I offer this as defendants' exhibit next in order.

Mr. Alioto: We have no objection, if your Honor please.

(The letter-agreement referred to was marked Defendant U Exhibit "Q" in evidence.)
[See Book of Exhibits.]

Mr. Alioto: I understand you are just offering the document, itself—no portion of the deposition.

Mr. Archer: That is right.

Q. (By Mr. Archer): Mr. Burwell, you mentioned the secret notations on here, and so forth. Those were put on pursuant to government order, were they not?

A. That is right, they were a code designation.

Mr. Archer: This letter, dated May 11, 1943, is a letter-contract between the United States, signed by K. D. Nichols, Lieutenant Colonel, Corps of Engineers, to the Union Mines Development Corporation, dated May 11, 1943 (reading):

"Gentlemen:

"The United States of America, acting through the undersigned contracting officer, has requested your corporation to perform the work hereinafter outlined, and we understand that in the interest of the war effort you are willing to exert your best efforts to perform such work, but it is understood that you make no representation or warranty whatsoever and assume no responsibility or obligation that the work can be successfully performed.

"Accordingly, the United States of America, act-

ing through the undersigned contracting officer, hereby places an order with you, that you shall with the utmost secrecy and dispatch, and in accordance with instructions of the contracting officer, or his duly-authorized representative, furnish all labor, materials and equipment not furnished by the government, and services, and do all things necessary to cover the work anticipated in a survey of S-37"—and then there is a blank—

- ——"and the development of suitable processes of beneficiation for such S-37."
- Q. (By Mr. Archer): Do you know what S-37 referred to, Mr. Burwell?
 - A. Yes, sir.

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- Q. To what did it refer?
- A. Uranium oxide, U3Os.
- Q. And that included uranium found in Colorado, on the Colorado Plateau, in conjunction with vanadium? [406]
 - A. In connection with vanadium.

Mr. Archer (continuing reading): "Your fee for conducting this survey will be determined by the contracting parties at a future date.

"The Secretary of War finds that it is in the interest of the war effort that this work be not delayed awaiting negotiations of a formal contract, and accordingly you are hereby given formal notice to proceed with the survey.

"It is the understanding of the parties hereto and the intention of this contract that all the work is to be performed at the expense of the govern-

ment, and that the government shall hold you harmless against any loss, expense (including, but not limited to, expense of litigation), or damage (including, but not limited to, liability to third persons because of death, bodily injury, property injury, destruction, patents, or otherwise) of any kind whatsoever arising out of or in connection with the performance of the work, except to the extent that such loss, expense, damage or liability is due to the personal failure on the part of your corporate officers, or other of your representatives having supervision or direction of the work as a whole, to exercise good faith or that degree of care which they normally exercise in the [407] conduct of your business.

"It is understood that disclosure of information relating to the work contracted for hereunder to any person not entitled to receive it, or failure to safeguard all secret, confidential and restricted matter that may come to the contractor or any person under his control in connection with the work under this contract, may subject the contractor, his agents, employees, and sub-contractors, to criminal liability under the laws of the United States.

"It is understood and agreed that the meaning of the code term, S-37, as used herein, as well as the general aims and procedure to be followed in the performance of the work hereunder, shall be set forth in a secret letter from the government to the contractor dated May 11, 1943, the contents of

said letter constituting a part of this contract to the same extent as is fully set forth herein. A copy of said letter shall be kept on file in the Manhattan District office."

- Q. (By Mr. Archer): Mr. Burwell, did Union Mines proceed to make this survey?
- A. We surely did. We carried out both the survey and the investigational processes, and I already testified this [408] is Process C, the process that, we felt, would relieve the Colorado Plateau in the future from responsibility, inhibitions and limitations placed by the vanadium industry. And under this same stipulation I spent, personally, \$375,000 for pilot-planning a process that would enable us after the war to get vanadium entirely uranium entirely free from vanadium. And we had consultations with Lieutenant Colonel Nichols, later General Nichols, Mr. Groves, Mr. Rafferty, Mr. Van Fleet and myself, as to this problem to which I have testified in fragments, at this time, that the future of the Colorado Plateau and the procurement of uranium that we had to have and process, that we would obtain the uranium independent and free of the restrictions of the vanadium industry, and not in proportion to vanadium sales.

And this is the conversation—this is the subject—this is the process that I talked to Mr. Bransome about in the spring of 1947, when I tried to enlist his help for the future of this industry.

Q. That was after this contract was terminated?

A. That is absolutely correct. I am very glad that you brought this up.

The Court: We will recess at this time until ten o'clock tomorrow morning.

(Whereupon an adjournment was taken until Thursday, June 5, 1958, at 10 o'clock a.m.)

Thursday, June 5, 1958, 9:45 O'Clock A.M.

(The following proceedings were had in Chambers, outside the presence of the Jury)

Mr. Alioto: If the Court please, yesterday we offered certain evidence covering the period prior to January, 1939, in the form of documents.

Mr. Holland: Isn't that July 1, 1938, you are talking about?

Mr. Alioto: The documents were all prior to January 1st.

Admittedly, however, the plaintiff made the contract with the Apex Company in July of 1938. The documents offered yesterday were for the purpose of showing the nature of the agreement in 1938 and 1939 and thereafter, but they were prior to both January 1st and July 1st of 1938.

In that same connection, we would like to inquire of the witness now on the stand, Mr. Blair Burwell, about certain policies, agreements and events which took place prior to January 1st of 1938 but which constitute the origin of the agreements that were in effect from 1938 through 1949 and which explain the nature of those agreements that were in effect for that period of time.

It is the theory of the plaintiff in this case that, by way of example, if we had a lease dated January 1, 1933, which [411] was to run for 15 years. In 1940, some question arose as to what was the nature of the relationship between the landlord and the lessee in 1940, covering events in 1940; I think we would immediately go to the 1933 lease to see the nature of the agreement between the landlord and the lessee.

The Court: If it were a matter between the parties to the lease, yes. Agreed.

Mr. Alioto: So it is on that basis that—in other words, we are now contending, if your Honor please, that the agreements in existence in 1938, '39, '40 and up through '49 had a direct impingement upon this plaintiff.

Now, we propose to show the nature of the agreements by the documents evidencing the origin of these agreements.

Specifically, in connection with this witness, we would like to prove the following facts, and while this may sound like a historical recitation, the fact remains that this witness can probably give it in a matter of 15 or 20 minutes—it is for the period prior to '33, and from '33 on—in a relatively short period of time because he did give this testimony in the Denver trial, in the trial of the United States Government against these defendants, charging a violation of the antitrust laws, for which these defendants were acquitted—this witness, we believe, would testify as follows:

That the operation of the Union Carbide Com-

pany in the field of vanadium can be separated into four different periods of time. [412]

The first was the period in which the Union Carbide and Carbon Corporation, through its wholly-owned subsidiary, the Electro Metallurgical Company, made investments in vanadium mines and facilities for the production of ferro-vanadium, investigated competing sources of vanadium, and established its policy for the long-time production of vanadium alloys, a production which remained in existence from 1938 through 1949, except for such modifications that were forced upon that policy by reason of certain Government regulations and Government statutes.

The initial period extended from 1926, when the United States Vanadium Company—when the Rifle Mill was acquired, to 1933, when this operation was closed and the plant dismantled due to certain stocks of unsold vanadium.

The Union Carbide Corporation entered into the vanadium business in 1926 because it had investigated the uses of vanadium in steel and believed that the markets and consumption of vanadium could be increased. The original plant which was purchased was increased to a capacity of 1,200,000 pounds of oxide annually in 1926, for this reason. They were going into this industry competitively rather than collusively.

There was a meeting held in Colorado in 1936, which this witness attended, the witness being Blair Burwell. The other persons present at that meeting

were Mr. John B. Hufford, the [413] Manager of Purchases of Union Carbide, Benjamin O'Shea, the President of Electro Metallurgical Company, Mr. Giles Meade, the Treasurer of Union Carbide and Carbon Corporation.

No question was raised at that time by the Electro Metallurgical Sales Company as to the ability of the company to sell vanadium produced at the expanded operation, and no question was raised about making any agreements with the Vanadium Corporation of America, restricting either production or sales of vanadium. Specifically, no question was raised at this time about setting up an agreement whereby the Vanadium Corporation of America would be permitted to capture between two-thirds and seventy per cent of the market by agreements with Union Carbide not to reduce the price of ferro-vanadium.

In 1927 and 1928, the witness Blair Burwell, together with Mr. J. R. Van Fleet, who later became President of the United States Vanadium Company, were called upon to recommend to the company the purchase of additional reserves of vanadium ore. The witness was advised by Mr. O'Shea, the President of Electro Metallurgical Company, that the company believed that the merits of the vanadium alloy justified Union Carbine and Carbon Corporation in further increasing their production of ferro-vanadium, and they were desirous of taking the leading position in the production and sales of this metal. At that time, vanadium was the leading alloy used in engineering steels and the

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use of ferro-molybdenum or molybdenum in steels [414] was secondary to that of vanadium.

The witness thereupon recommended to Mr. O'Shea, Mr. Meade and Mr. Hufford that the properties on the Colorado Plateau be purchased. As a result of this recommendation, certain mine properties in Montrose County were visited by Mr. O'Shea, Mr. Meade, Mr. Hutord, Mr. Van Fleet and the witness in about 1928, and negotiations for the purchase of these properties were initiated through Mr. John B. Hufford and the witness. However, before making this acquisition, it was decided to make an investigation of the Vanadium Corporation of America's mines in Peru to determine the position of this company to produce vanadium in the future and to determine the competitive effect or the competitive advantage that the Union Carbide companies had over the Vanadium Corporation of America.

Accordingly, Mr Van Fleet made a secret visit down to Peru and came back and reported that the high-grade ore of the Peruvian mines of the Vanadium Corporation of America had been exhausted and that, therefore, the Peruvian mines would not be able to compete with the production on the Colorado Plateau. This fact was, of course, later verified and later admitted by the Vanadium Corporation of America. In fact, the Vanadium Corporation of America stopped shipping from Peru for a long period of time and thereafter had to install a very expensive plant for the purpose

of concentrating the lower-grade ores which they retrieved from the mine in question. [415]

Based upon this knowledge of the favorable competitive position which Union Carbide enjoyed over the Vanadium Corporation of America, a definite policy was agreed upon between the officials of Electro Metallurgical Company, specifically Mr. O'Shea, Mr. Hufford, and the officials of the United States Vanadium Company, Mr. Van Fleet and the witness, Mr. Blair Burwell.

That policy was to acquire a monopoly of the mining areas and control of the entire Colorado Plateau. That policy specifically included a direction that any independent competition of oxide mills should be eliminated and any independent competition from producers or miners should be eliminated. That was a specific policy and a policy which remained in effect in 1938 through 1949, and it was on the basis of that policy that this witness took the steps that he did to eliminate the competition from the Gateway area, the Loma area, the Mesa Vanadium Mill area and others about which he has already testified.

However, one modification of that policy was made in the period from 1933 forward, and that was a modification which included definite agreements between the Vanadium Corporation of America and the Union Carbide Company. Those agreements were predicated upon considerations relating to neutralizing competition in the ferro-chrome field and in other alloys. The evidence of this witness will show that very important policy meetings were

held within the Union Carbide organization between [416] 1933 and 1935. The evidence of this witness will show, together with certain documents, that there were also very important policy meetings held between the officials of the Vanadium Corporation and the officials of Union Carbon.

Taking those one at a time, the witness will testify that early in 1934 a study of the vanadium industry was ordered by the top officials of the Union Carbide Company, and these included Mr. MacQuigg of the Research Department; they included Mr. Priestley of Electro Metallurgical Sales, they included Mr. Dutot, Mr. Critchett, the witness, Mr. Van Fleet and others.

As a result of those meetings, the Research Department was ordered and instructed to prepare a report on the competitive situation in vanadium and to prepare recommendations as to what should be done.

The recommendations of the Research Committee were to lower the price of ferro-vanadium to \$2.25, but the Research Committee also set up three alternatives, two of which comprehended cooperation with the Vanadium Corporation of America, and the third of which comprehended straight competition with the Vanadium Corporation of America and no agreements on prices, production or the elimination of competition or anything else.

This matter was discussed by the top officials, the witness will testify, of the Union Carbide Corporation, and it was also discussed between the top B.,

officials of the Vanadium Corporation and the Union Carbide. [417]

As a result of these meetings and as a result of these studies, it was formally decided, against the wishes of the witness and Mr. Van Fleet, to abandon the route of competition and to take the route of agreement between Union Carbide and the Vanadium Corporation of America.

Accordingly, an agreement was made. The agreement comprehended that the Vanadium Corporation of America—the agreement was made as a result of direct meetings between the Vanadium Corporation of America and Union Carbide. The agreement contemplated that the competitive disadvantage at which the Vanadium Corporation of America found itself, because its Peruvian mines had lost their high-grade ore, would be compensated for by United States Vanadium supplying to the Vanadium Corporation of America its requirements of vanadium oxide to produce ferrovanadium.

The agreement also embodied an undertaking by the Electro Metallurgical Sales to let the Vanadium Corporation of America set the price for ferrovanadium and to let Vanadium Corporation of America have two-thirds to seventy per cent of the market on ferro-vanadium, and that the Vanadium Corporation of America would acquire some of its supplies from the United States Vanadium Corporation—that is, the supplies of oxide.

The agreement also contemplated that they would cooperate with each other on the price, that they 430

would respect each other's customers, that there would be no competition, no [418] price competition for customers, and also comprehended that they would act jointly in connection with the elimination of competition either in the production of ferro-vanadium or vanadium oxide.

The witness will testify that in making this agreement the United States Vanadium Company, which was the operating company on mines and the production of oxide, disagreed with the position of the Electro Metallurgical Company, and it was the position of the Electro Metallurgical Company that it met with the approval of the board of directors. The Electro Metallurgical Company at the same time not only produced and sold ferro-vanadium but produced and sold other alloys, including ferro-chrome, which were produced and sold by the Vanadium Corporation of America.

The agreement not to compete was made not only on ferro-vanadium and vanadium exide, it was made as well on ferro-chrome and the other alloys which the defendants produced and sold in common.

This agreement continued without interruption from 1933 right up to the end of 1938 and was implemented by various acts occurring after January 1st of 1938.

It is again the position of the plaintiff that while the meetings evidencing this agreement were, in fact, held before January 1st of 1938, there isn't any question about it that they nevertheless explain the nature of the agreement which [419] was in effect from 1938 to 1949, and upon that basis we make this offer of proof, and we offer to prove those facts from this witness, and we believe, if your Honor please, that all of those facts can be proved in approximately an hour—the testimony, in approximately an hour, an hour and a half.

Mr. Holland: The Court has already ruled on this.

Do you wish to hear from me?

The Court: "You can make your statement, any statements you want to make.

Mr. Holland: I would like to make the statement, first, that I think Mr. Alioto is very optimistic on the time schedule of proving these or attempting to prove these facts, because it took a great deal longer than that in the Denver case.

Also involved, of course, would be all of the proof that the defendants would have to offer to refute those charges, which they were successful in refuting the Denver case.

As Mr. Alioto has said, these facts were all brought out in the Denver case by this witness, and the defendants offered extensive evidence on these facts, and the decision resulted in an acquittal.

It is the position of the defendants that the Court should properly set a time limit behind which we can't go or this case would be dragged out for a long period of time, and that is particularly true in a case where these issues have already been tried once. [420]

If your Honor wants any authority on this propo-

sition, I have some—I will have to go out in the courtroom and get it.

The Court: I don't care to go into that.

Do you have anything to say?

Mr. Archer: Just one. In addition to adopting Mr. Holland's remarks, I want to say that in regard to this report, which is entitled the MacQuigg report, and the rest of the people referred to in the offer of proof, all of them are now dead, except for Mr. Priestley and Mr. Dutot. Mr. Dutot is no longer employed by the company; he is, in fact, employed by a competitor. Mr. Priestley is the only one who is still alive of all of these people that have been mentioned.

Mr. Alioto: In view of the statement of Mr. Archer, may I supplement the offer of proof, in this respect: We do not agree that the principal parties involved in the making of this policy are dead. We think that the principal person in the Electro Metallurgical Company, insofar as the making of this policy of collusion with V.C.A. was concerned, was Mr. Priestley, who is not dead, who is living, and who, as counsel has already stated in the records of this case, will be in attendance at this trial, and I assume that Mr. Priestley is presently in San Francisco.

Mr. Blair Burwell, the witness, is of course alive. He is on the stand at the present time. So we perceive there is [421] no problem about the question of who is dead or who is alive and, furthermore, we don't think that is material. We think that so far as the corporate acts are concerned and cor-

porate records, that the records speak for themselves.

Furthermore, with respect to the comments of Mr. Holland, that this would take a very long time, I don't think the Denver trial went 10-trial days. Did it?

Mr. Holland: Well, it would take another five days here. I think five of them were devoted to this period prior to '38.

The Court: Well, the Court has heretofore indicated his ruling on this matter. I might state further, though, that this is an action by the plaintiffs and before the plaintiffs can recover in this case, it is necessary to show that they have been damaged by some act of the defendants.

Now, during this period of time, the question prior to '38, the plaintiffs were not even residents of the United States; they weren't here. Their company was organized in '38 and '39, and you have been permitted to ask the witness on the stand what the general policy of the companies, the defendant companies, were in 1938 and '39, and he has testified to that.

The Court has permitted some evidence to go in which might go in to show—you asked him the direct question and he answered that they did this to keep these other people from operating. [422]

Now, the plaintiff in this case must show that he has been damaged by some act of these defendants, not in 1933 and 1935, but in 1938 and '39 and '40.

The offer will be refused, and an exception allowed. [422-A]

(Whereupon the Court and counsel for the respective parties entered the courtroom and the following proceedings were had within the presence and hearing of the jury:)

The Court: At this time the Court desires to make an announcement.

Members of the jury and others interested: The Court will recess tomorrow at twelve o'clock. Some other matters have come up which necessitate the attendance of attorneys elsewhere, and their matters will come up after twelve o'clock. So we will recess at twelve o'clock tomorrow.

There is something about a meeting on Monday, but I do not think that will interfere with this court, will it?

Mr. Alioto: Not so far as we are concerned.

Mr. Archer: No, your Honor.

BLAIR BURWELL

a witness on behalf of the plaintiffs, on the stand at the time of yesterday's adjournment, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination—(Resumed)

Q. (By Mr. Archer): Mr. Burwell, I think yesterday, as I read the transcript on page 333, we were talking about the Dry Valley claims. You answered they were owned by many, many people. This is on page 332. I asked the question: [423]

"In 1938 the Molybdenum Corporation had it?" And on page 333 the answer is:

"They have acquired it from Floyd Ackerman." I believe you said "Floyd Odlum," is that right? A. That is right.

Q. And on page 343, on an occasion when I was reading from one of the exhibits, I read this:

"In June, 1942, an additional allowance of \$1.50 per ton on ore delivered was added to the schedule Attachment 1 in order to meet competition with plants more favorably located to receive ore from south and southwest areas."

You answered:

"That was the Vanadium Corporation plant." -

By "Vanadium Corporation" you meant the other defendant, Vanadium Corporation of America?

- A. That is correct.
- Q. Mr. Burwell, I believe you testified in the administration of the Metals Reserve contracts by the United States Vanadium Corporation, that John Hill handled the affairs from Grand Junction under your supervision, is that correct?
- A. Yes. He was supervising engineer, I think was his title.
- Q. He customarily made reports to Metals Reserve and to you on the operations of the plant at Durango and at Gateway, did he not?
 - A. That was part of his duty.
- Q. I will show you now a report of the United States Vanadium Corporation, agent for Metals Reserve, for November 30th, but it is dated December 20, 1943, John W. Hill, supervising engineer, Met-

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als Reserve Company, and ask you whether this is one of those reports.

A. That is correct, Mr. Archer.

Mr. Archer: I offer this report in evidence as defendants' exhibit next in order.

Mr. Alioto: If your Honor please, I have not seen the report yet, but I do want to make the observation that up to this point we have not objected on the ground of hearsay, but obviously a statement by a man by the name of Mr. Hill to somebody in Washington was never brought to the attention of the plaintiff, and is a hearsay statement. We are going to object on the basis of hearsay, your Honor. We can get all these reports in for the next ten days, it seems to me.

Furthermore, as of this moment, there has been no evidence that we are claiming any damage from anything resulting from the government program, as distinguished from private action, and I just do not see the relevancy of this evidence.

The Court: Overruled. Exception. This is cross-examination.

Mr. Alioto: Incidentally, did you find that [425] letter yesterday that you were going to look for?

Mr. Archer: Yes.

Mr. Alioto: May I take a look at it while you are putting this in?

The Court: This is a report by Mr. Hill, as I understand it.

The Witness: I presume that is it, your Honor. It is a routine report of the operations of Metals

Reserve which Mr. Hill made of the mill in the producing of ore and the duties we were to carry out with the government.

(The report referred to was thereupon marked Defendant U Exhibit R in evidence.)
[See Book of Exhibits.]

Q. (By Mr. Archer): Mr. Burwell, I would like to invite your attention to the processing plant report for November, 1943, on the Durango plant, which I have marked with a paper clip here, and the processing plant report on the Nisley & Wilson Gateway vanadium mill dated November 30, 1943.

I think I marked the wrong place. Will the Court indulge me a moment here?

That is right. I believe you testified that the Durango plant was built as a hundred-ton-a-day operation, at a cost of approximately \$100,000?

- A. That is correct.
- Q. Does the page to which I referred you in that exhibit [426] show the cost of vanadium oxide to the government at the Durango plant through November, 1943? $\sim \Lambda$. It does.
 - Q. What is that cost?
- A. The cost per pound of V₂O₅, in the material fused oxide sacked, treated, and dated, was \$1.52 per pound, and the cost per ton of V₂O₅ contained in the ore was 62.8 cents per pound.
- Q. And the finished product, being the cost of V_2O_2 sacked, is that correct?
 - A. That is correct.

- Q. If you will turn to the second page, where I have a clip, you will see the same kind of report for the Nisley & Wlison mill, is that not correct?
 - A. That is correct.
- Q. What is the cost for the finished vanadium oxide shown there?
- A. \$1.65 a pound for the treated to date; \$1.55 on the current month.

Mr. Archer: Your Honor, when I finished yesterday I was reading an exhibit that I think has been returned by now. I had finished reading the letter-agreement dated May 11, 1943, between the Union Mines Development Corporation and the United States of America, and attached to that is the final contract dated April 17, 1944, effective as of the 11th day of May, 1943. [427] It has the various recitals, and I will read the pertinent paragraphs. If somebody else wants to read others, they can be read (reading):

"Objectives and Scope-Statement of Project

"The contractor shall, at the cost and expense of the government (see Title II) and in accordance with instructions of the contracting officer, exert its best efforts to furnish all labor, materials and equipment not furnished by the government, and otherwise do all things necessary to determine and evaluate the"—

Then there is a blank-

^{--- &}quot;resources of S-37,"-

Q. (By Mr. Archer): I believe you testified

S-37 referred to uranium, did you not, Mr. Burwell? A. That is correct.

Mr. Archer (continuing reading): ——"to make recommendations for the acquisition of the strongest possible control of the production and disposal of such resources as may be accessible and are considered to have commercial value, to make recommendations for suitable methods of exploitation of any such resources as may be found, and to make recommendations for the beneficiation of any supplies [428] of S-37 which may be acquired"——

Q. (By Mr. Archer): What does "beneficiation" mean, Mr. Burwell?

A. Processing in plants to recover the minerals and metals that are in them.

Mr. Archer: It goes on to say (continuing reading):

—"Except as the contracting officer may otherwise direct or approve, the contractor shall conduct the project with the utmost secrecy and dispatch and shall not inform its subcontractors or other outside organizations that any of the project is being performed for the government."

Q. (By Mr. Archer): Through the administration of this contract, Mr. Burwell, it is true, is it not, that you were not permitted to say either that you were acquiring the uranium resources, or that you were acquiring them for the government?

A. I think basically that is correct.

Mr. Archer: Reading from Paragraph 2 (c) on page 3 (reading):

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(Testimony of Blair Burwell.)

"When promising deposits of S-37 are discovered or are reasonably believed to exist as a result of the work hereunder the contractor shall make recommendations to the contracting officer for the [429] acquisition of the strongest possible control of the production and disposal of the desired resources. In accordance with such recommendations and to the extent directed or approved by the contracting officer, the contractor shall, as a part of the project, exert its best efforts to acquire (by purchase, staking, filing, refiling or otherwise) claims discovered by the contractor in carrying out the project on all mineral deposits containing or believed by the contracting officer and/or by the contractor to contain S-37 or to contain other mineral deposits of value which the government wishes to own directly or through a governmental agency. All such claims so acquired shall be located, filed or otherwise acquired in the name of the contractor or otherwise as the contracting officer shall direct. The contractor is empowered, upon the direction or approval of, and to the extent authorized in writing by, the contracting officer, to purchase or otherwise acquire for the government or a governmental agency, as the contracting officer may direct, hold in its name or otherwise as the contracting officer may direct, secure or grant leases of, obtain options for rights in, assign, transfer, sell or otherwise [430] dispose of metals, minerals, and ores, lands containing metals, minerals, or ores, and claims or other rights with regard to metals,

minerals or ores. Such right, title and interest to any property, real or personal, leasehold or option, as may be acquired by the contractor pursuant to this paragraph shall, unless such property shall be abandoned or otherwise disposed of as approved by the contracting officer, be held by the contractor for the government or a governmental agency, as the contracting officer may direct, and be turned over to the government or such governmental agency at the request of the contracting officer, subject to any leases, claims, options or other rights in third parties not granted by the contractor or granted by the contractor with the approval of the contracting officer."

There are various provisions in here for the acquisition of these claims.

Then it goes on to say, on page 5, Paragraph Sub-(f) (reading):

"To the extent mutually agreed upon between the parties hereto, research work for the development of varying processes for beneficiation of S-37 occurrences in many different types of ores, milled [431] products and other products shall be carried on."

Q. (By Mr. Archer): Do you recall when the operations under this contract were terminated, Mr. Burwell?

A. Not too definitely, Mr. Archer. I believe it is in the record. There is more than one contract, Mr. Archer. There is an amendment to that contract. But that is equally pertinent.

- Q. There are actually a good many amendments, are there not?
 - A. Yes. There is a very pertinent amendment.
- Q. (By the Court): When was the final contract terminated, the last contract terminated?
- A. I believe, your Honor, about 1945, or maybe early 1946, somewhere in that time—between 1944 and 1946, somewhere in that time.
- Q. (By Mr. Archer): Mr. Burwell, I show you now a construction, operation and maintenance report of uranium sludge plants operated by the United States Vanadium Corporation in the Colorado area, submitted by Blair Burwell, vice-president, February 25, 1946.

This has substantially been declassified, your Honor, but is not completely. The one part I wish to show the witness is the part entitled "Historical Outline," which has been declassified. [432] I have made a copy.

Mr. Alioto: Where is the full report, Mr. Archer? Mr. Archer: Right here.

Mr. Alioto: Do you claim that is classified? If it is, what are you doing with it?

Mr. Archer: I have a Q clearance. You will notice on the historical outline the notation "Secret" has been marked out, and I just compared it with the paper I handed you.

The Witness: Yes.

A. This is one, Mr. Armer,—one of two reports which I wrote.

Q. (By Mr. Archer): And the historical outline is correct, is it not?

A. Yes, it is correct.

Mr. Archer: Your Honor, I now offer in evidence as defendants' exhibit next in order, the historical outline from Mr. Burwell's report.

The Witness: Let me look once more at this historical outline. I was looking at the main report, Mr. Archer. That is a separated document, and I didn't give it the attention I should have—this one right here. It is the same thing. That is correct.

Mr. Alioto: Who is supposed to have written this, counsel? [433]

Mr. Archer: Mr. Burwell. My secretary typed this up from this page.

Mr. Alioto: Does she have a clearance, too?

Mr. Archer: This page has been declassified.

The Witness: Your Honor, I question that.

Mr. Archer: The page?

The Court: Just a moment.

The Witness: I mean, I have been on the inside of this classification, your Honor, and put these stamps on, and I am familiar to a certain extent with what is classified and declassified, and I think that is top secret. I don't think even anybody with a Q clearance today—and I have one—can go back into that material, because contained in there is the pounds of uranium that went into the atom bomb job. That has a top clearance, and I question it.

444 Continental Ore Company, et al., vs.

(Testimony of Blair Burwell.)

Mr. Archer: Mr. Burwell, I am not offering that. I am offering only the historical outline.

The Witness: It is an open document, and it is not contained in the usual security manner that these documents are supposed to be maintained. They are supposed to be in locked files, and certain people are given the combination to—it, and well I know that, Mr. Archer. I am afraid we are getting a bit careless here in the legal interpretations of a very essential project. I wish to go on record saying that. [434]

Mr. Archer: Your Honor, this document was kept until about three weeks ago in the office of the Atomic Energy Commission in Oakland, California. At my request it was sent to the Atomic Energy Commission in Washington, D. C., for classification purposes, and was declassified and sent back to me.

Mr. Alioto: Who marked the word "Secret" off this document?

Mr. Archer: I did.

Mr. Alioto: Do you have authority to declassify documents?

Mr. Archer: I had the authority to take the "Secret" off there when I sent it back.

Mr. Alioto: It is a great system we are living under.

But we have no objection to the document going in.

(The report referred to was thereupon marked Defendant U Exhibit S in evidence.)

Mr. Alioto: Mr. Archer, is it possible for me to see the one page of the book from which that statement was taken?

Mr. Archer: Certainly. As far as I am concerned this has been declassified. Mr. Burwell disagrees with me.

Q. (By Mr. Archer): You will agree there is nothing classified on this [435] exhibit, won't you, Mr. Burwell?

The Court: Go ahead and see what is in it.

Mr. Archer: "Historical Outline."

I am skipping the first paragraph, which is technical, as I see it (reading):

"In the fall of 1942 officers from the Manhattan District"——

Mr. Alioto: Excuse me, Mr. Archer. It is a very short paragraph and goes back to 1937 and 1938. I would appreciate if you would start from the beginning. It is a very short paragraph.

Mr. Archer: I have no objection (reading):

"Historical Outline

"The complete acid leaching process was operated at Uravan, Colorado, in 1937 and 1938, as a continuous sand leaching process. In this operation the filtering units were constructed of stainless steel and rubber to withstand the acid solutions and the green sludge produced was stored in outdoor filter ponds for later treatment. Various types of mechanical difficulties were encountered in this process and rectangular concrete leaching tanks were

substituted for the acid-proof filters. This operation was mechanically sound and operated for approximately two years. During this operation approximately 250,000 pounds of U₂O₅ was produced in the form of green sludge. During the same period of operation this sludge was refined in Uravan by the sodium carbonate roasting step and a vanadium and uranium concentrate was produced.

"In the fall of 1942 officers from the Manhattan District discussed with United States Vanadium Corporation officials a possible operation in the Colorado area on the production of a uranium product that could be refined at other plants to produce a desired material. The United States Vanadium Corporation officials felt that many improvements were indicated in the present process, and that approximately six months would be required to develop a more satisfactory method of processing the uranium-bearing sands. Officers of the War Department did not feel that the delay could be made, and requested that the company proceed with the present process in which four pounds of UaOs and five pounds of VaOs were recovered from the sand tailings.

"Construction was started by the Stearns-Roger Manufacturing Company on the acid leaching plant at Durango, Colorado, the acid leaching plant at Uravan, Colorado, and the sodium carbonate roasting plant at Grand Junction, Colorado, in the spring of 1943. [437] The two acid leaching plants started operations in July, 1943, and the Grand

Junction plant started operations in August of 1943. In order to supplement the production from the acid leaching units, a second plant, belonging to the United States Vanadium Corporation, was put in operation at Uravan in June of 1944. The operations were discontinued on all plants in the late summer and early fall of 1945."

Q. (By Mr. Archer): Now, Mr. Burwell, you have referred to the Metals Reserve Company plant.

Mr. Alioto: Excuse me, counsel. Have you finished reading the document?

Mr. Archer: Yes.

Mr. Alioto: If your Honor please, I have no objection to the Court and the jury hearing anything, but now that has been read I think it is manifestly irrelevant to any issue.

The Court: I did not get your statement.

Mr. Alioto: As I say, I have no objection to the Court and the jury hearing anything, if the Court please, but I think it appears, now that it has been read, that it is manifestly irrelevant, and I would like to make a motion to strike the portion of this secret report that has been submitted on the ground it is not relevant. It simply goes to [438] government operation only, not the private actions this witness testified to.

The Court: Overruled. Exception.

Q. (By Mr. Archer): Mr. Burwell, this report refers to an acid leaching plant at Durango, Colorado, does it not? A. That is correct.

Q. We have previously talked here about the

Durango plant as being operated by Metals Reserve, have we not? A. That is correct.

- Q. And this is the plant which United States Vanadium Corporation exercised its option to buy in 1944?

 A. That is correct.
- Q. In addition to the oxide plant, the vanadium oxide plant at Durango, who operated this acid leaching plant for uranium at Durango?
 - A. U. S. Vanadium Corporation.
 - Q. For the United States Army?
- A. The same company. Another contract. The same company.
- Q. And they were operating that plant prior to the time that the United States Vanadium Corporation exercised its option to purchase the plant, did they not?

 A. Oh, certainly.
- Q. After you exercised the option to purchase the Durango plant you continued to operate, to bring the uranium oxide out [439] of the Durango plant for the United States Army?
- * A. That is correct; and also vanadium at the same time, in the same plant—vanadium and uranium. They were both produced in the same plant.
 - Q. (By the Court): For the Army?
- A. They were both, your Honor, produced in the same plant—vanadium and uranium.
 - Q. Yes. But were they produced for the Army?
- A. They were produced in one plant, the uranium for the Army, and the vanadium was produced for the Army and turned over to the government as part of the stock pile, your Honor.

Q. That was after you purchased this from the government? After you exercised your option to purchase?

A. Well, I am just a bit unclear, your Honor, about these exact dates. We get a precise definition of dates here. We acquired the property for the United States Vanadium Corporation in accordance with this telegram that was read into evidence a day or two before, and I think if we refer to that date that we had agreed to purchase, it would clear me from any lack of—

Q. What I am getting at is, you had, under your agreement with the government, an option to purchase? A. That is correct.

Q. Now, you exercised that option. [440]

A. We did.

Q. Then after you exercised that option, did you, when you manufactured uranium and vanadium, was that for the government?

A. My recollection, your Honor, is that that portion of the plant that was producing uranium and vanadium was operated for the government. The other portion of the plant, all connected together, really, was operated for private account, both producing the same materials. It was a bit complicated. I do not think it is really too pertinent. If you want more details I will give it, but I don't think we need to take the time to do so.

Q. (By Mr. Archer): I will show you a letter, Mr. Burwell, dated October 4, 1944, from yourself to the Metals Reserve Company, and ask you 450

(Testimony of Blair Burwell.) whether or not you can identify that. Maybe that will set the dates.

A. Oh, yes. Thank you very much.

October 4, 1944, is when we purchased the plant, and I enclosed the check.

Mr. Archer: I offer this in evidence as defendants' exhibit next in order, your Honor.

Mr. Alioto: Do you have any objection to reading the purchase price of that plant to the jury, Mr. Archer?

Mr. Archer: No objection at all. [441]

(The letter referred to was thereupon marked Defendant U Exhibit T in evidence.)
[See Book of Exhibits.]

Mr. Archer: This is a letter of October 4, 1944, to Metals Reserve Company, Washington 25, D. C., Attention Mr. H. DeWitt Smith, Executive Vice President (reading):

"Gentlemen:

"In reply to your letter of September 30, 1944, we are enclosing our check for \$86,152.16 in payment for purchase of buildings, machinery and equipment located at Durango, County of La Platte, Colorado, as per bill of sale executed on July 31, 1944, from the Metals Reserve Company."—

Do you want me to read the remainder?

Mr. Alioto: So far as I am concerned you have finished reading the purchase price. I don't care for anything else, unless you want to read it yourself.

Q. (By Mr. Archer): Mr. Burwell, I think

(Testimony of Blair Burwell.)
you previously testified you bought this to keep
some outsiders from acquiring it, is that correct?

A. That is correct. [442]

- Q. Now, when you exercised the option, you dealt directly with these men at Metals Reserve, did you not? A. Correct.
- Q. But there were many business reasons for purchasing Durango, were there not?
 - A. From purchasing direct?
- Q. From purchasing Durango. For purchasing the plant.
 A. Yes, there were.
- Q. To replace it or to build a plant of that type would cost roughly three-quarters of a million dollars at the time you exercised your option, would it not?

 A. That's correct.
- Q. So it was obviously good business to exercise your option to buy the plant, wasn't it?
- A. Providing we had the ore supply tributary to the plant to use the three-quarters of a million dollar plant, Mr. Archer.
- Q. And at the same time, the Metals Reserve had a large stockpile of ore right at the plant?
 - A. That's right.
- Q. In which you made a contract with Metals Reserve to process that ore for them and deliver the oxide to them, did you not?
- A. That's correct. It was a stockpile purchased by the government money that had not been processed when the program [443] had been closed and the government decided to, instead of leaving it in ore that couldn't be used, to turn it into prod-

ucts that could be used. That we did under what we call a toll agreement, so much a pound for the job we did.

- Q. Is this the agreement about which you are speaking, Mr. Burwell?
- A. I quoted from memory $62\frac{1}{2}$ cents a pound of V_2O_3 that we charged.
 - Q. This is dated October 13, 1944.
 - A. (Witness examining) That's correct.
- Q. It is a conformed copy signed by Mr. Van Fleet and DeWitt Smith.

(To Mr. Alioto) You have a copy.

Mr. Alioto): We have no objection, Mr. Archer.

(Agreement dated October 13, 1944, by and between U. S. Vanadium Corporation and Metals Reserve Company, received into evidence and marked Defendant Union's Exhibit U in evidence.)

[See Book of Exhibits.]

- Q. (By Mr. Archer): Mr. Burwell, do you know where the oxide went which you processed or what disposition was made of the oxide—I think it would be better to say—of the oxide that you processed under this contract in October, 1944, for Metals Reserve?
 - A. Mr. Archer, I don't recall at this time.
- Q. May I suggest, it was sent to the Metals Reserve stockpile in St. Louis, Missouri? [444]
- A. Well, it was delivered to the order of Metals Reserve. Wherever it went, I don't recall the town or destination, I don't recall.

Q. But it wasn't for a private account?

A. It was the account of the Metals Reserve, in accordance with the agreement.

- Q. That's right. Now, another reason why you thought it was a good idea to purchase the Durango plant was because it was on a very strategic location, located on the railroad serving this and had potentials for the future, is that not right?
 - A. That is correct.
 - Q. It had also had housing available?
 - A. That's correct.
- Q. Are you able to recall how much vanadium oxide you processed for the Metals Reserve under this contract?

 A. The entire contract?
 - Q. Yes, this last one? A. This last one?
- Q. Yes, just this last one, the one in October '44—in other words, the Durango stockpile.
- A. I can give you an approximation. Somewhere around 600-650 thousand pounds of V_2O_5 .
- Q. Referring again to the telegram, you recall that your [445] letter exercising the option to purchase was dated October 12, 1944?
 - A. The telegram?
- Q. No, your letter exercising the option was October 12, 1944. A. Whatever it is.
 - Q. Yes. A. I don't have a record here.
- Q. I have a copy of that telegram but I don't know the exhibit number of the one——

Mr. Alioto: We can find it.

Mr. Archer: Now I will show you Exhibit 37 and Exhibit T.

Q. Now, Exhibit 37 is your telegram to Mr. Haldane stating that:

"Brock Advises That Brinker With Sitton and Other Promoters Are Reported to Be Planning to Take the Durango Plant in Case We Do Not Recapture It Stop This Is Rumor Only But Suggest You Advise Mr Rafferty Regards Blair Burwell"

This was dated February 29, 1944, correct?

- A. That's correct.
- Q. And your letter exercising the option is dated October 12, 1944?
 - The same year, following it, that's correct.
- Now, you were also informed at that time that there were other outsiders who were trying to acquire the Durango plant, were you not?
 - That's correct.
- Q. One of them was Vanadium Corporation of America, the other defendant here, isn't that correct?
- Why, I heard a rumor to that but that Α. wasn't the person that I was referring to in the "promoters." "Promoters" was a code word, Mr. Archer.
 - Q. To whom were you referring?
- A. Is a code word established by military intelligence. If you want me to tell that, you clear it with the Army.
- Q. You mean you aren't able to state who the other promoters were?
- A. If the Court asks me to do it, I will be very happy.

The Court: No, I don't think you need to.

A. I don't think it's pertinent here at all.

Q. (By Mr. Archer): Well, isn't it a fact, Mr. Burwell, that one of the reasons you exercised the option on the Durango plant was because the Army requested you to prevent it from falling into the hands of some of these people referred to in the code word "promoters"?

A. There were two reasons, Mr. Archer——

The Court: That doesn't answer his question.

Answer his question first and then explain. [447]

A. That was correct insofar as that is concerned.

The Court: One question—it may be in the record. What supplies did you have on hand—were there for any of these defendant companies—when these contracts with the government were concluded? What vanadium did you have or alloys?

A. Insofar as the oxide, your Honor, which I do have some recollection, I think exceeded a million pounds at the time all these contracts were concluded. They were from a million to a million and a half pounds. But shortly after that we closed all our plants because we couldn't dispose of the vanadium we had.

The Court: Now, that belonged to the government at that time?

A. That belonged to the companies, the United States Vanadium Corporation.

The Court: Well, was that during the time that the government was operating?

A. The government operated up to approximately mid-'43 and then—in about a year and half, your Honor, we were operating under government allocations—and in a period of a year and a half we had filled all the needs of the government, and the government says: We don't need any more vanadium, and the companies were operating from mid-'43 on, producing on their own account and we had accumulated, [448] United States Vanadium Corporation—I don't know how much V.C.A. did—approximately a million and a half pounds of vanadium unsold, around '43.

The Court: What disposition did you make of that?

A. Well, that finally was—we shut down our plants about that time, the Uravan plant went down, the Rifle plant continued to operate; the material laid in our warehouses, we shut all our—dismissed all our employees, men; and on or about 1946 this was disposed of to the Treasury Procurement in accordance with the testimony that I made in regard to Mr. Chaffee and the conversation regarding Mr. Priestley down in Washington.

In other words, we finally sold it to the stockpile, a stockpile agreement, a stockpile which was set up later by the government in anticipation that we might have another war and that they didn't want to be caught short with the lack of vanadium for the future. So they set up, after this, the government, a stockpile program to acquire vanadium in anticipation—

The Court: What I was getting at: Was this supply that you had on hand offered to the general purchasing public?

A. Oh, yes. Oh, yes. We were anxious to sell it. We were trying to beat every doorbell and sell it wherever we could. [449]

The Court: Would you have sold it and did you sell it to anybody that wanted to buy it?

- A. We would have sold it to anybody that wanted to buy it. We were anxious to sell it to anybody that wanted to buy it. If we didn't sell it, we had to lay our men off, four or five hundred men. Sure we wanted to sell it.
- Q. (By Mr. Archer): Mr. Burwell, when United States Vanadium Corporation processed uranium oxide for the United States Government, the government purchased the oxide, did it not, the uranium oxide?
- A. They purchased a small portion of it, Mr. Archer, and they took the other portion, which was a part of the contract—they paid the cost of the processing and we sold the uranium in the ore unprocessed at 25 cents a pound of recovered U₂O₅. I think that was the arrangement.
- Q. They also purchased the vanadium, too, the vanadium oxide that resulted?
- A. They purchased the vanadium, not in the oxide that resulted, but the vanadium in the material that entered the plant for the recovery of uranium, at the same price, 25 cents a pound.
 - Q. Well, I will show you the three contracts

that I have. The first is W-7405 eng-201, dated September 1, 1943, effective as of June 1, 1943, between the United States and United States Vanadium Corporation. [450]

- A. What division of the United States?
- Q. This is the Army contract.
- A. The Army?
- Q. Yes.

Contract W-7405 eng-250, dated June 26, 1944, effective as of July 10, 1943, between the United States and the United States Vanadium Corporation.

And Contract No. W-7405 eng-32, entered into May 12, 1943, effective January 25, 1943.

And ask you whether you can identify these contracts. I think one of these you signed and the others Mr. Van Fleet signed.

(Witness examining.)

Mr. Alioto: Mr. Archer, you won't have to waste time on identification if that is what you are talking about. If you will tell me that they are authentic, we will stipulate to that.

The Witness: Yes, these are all—I can identify them all.

Mr. Archer: Your Honor, these are contracts for the production of uranium and vanadium by the defendant United States Vanadium Corporation with the United States of America. I offer them as Defendant's exhibits next in order.

Mr. Alioto: We don't think they are relevant but we have no objection to them. [451]

The Court: They will be admitted.

If you gentlemen can agree on something, why,

we won't pass it up.

(Contract No. W-7405 eng-201, dated September 1, 1943, effective as of June 1, 1943, between United States of America and United States Vanadium Corporation, received in exidence and marked Defendant Union's Exhibit V:

(Contract No. W-7405 eng-250, dated June 26, 1944, effective as of July 10, 1943, between the United States of America and United States Vanadium Corporation, received in evidence and marked Defendant Union's Exhibit W;

(Contract No. W-7405 eng-32, entered into May 12, 1943, effective January 25, 1943, received in evidence and marked Defendant Union's Exhibit X.)

Q. (By Mr. Archer): This may refresh your recollection, Mr. Burwell. I will read them.

This is the first page:

(Reading Defendant Union's Exhibit V)

"This contract, entered into this first day of September, 1943, effective as of the 1st day of June, 1943, by the United States of America (hereinafter called the 'Government'), represented by the Contracting Officer executing this contract, and United States Vanadium Corporation, a corporation organized and existing under the laws of the State of [452] Delaware,"

and it is signed by Lt. Col. John R. Ruhoff, Corps

(Testimony of Blair Burwell.) of Engineers, for the United States of America, and by J. R. Van Fleet.

"Article I - Scope of this Contract

"(a) The Contractor shall, with the utmost secrecy and dispatch, furnish and deliver to the Government, f.o.b. Contractor's plant at Uravan, Colorado, for a period of two years and such additional period or periods as the Government and the Contractor may agree upon except as provided under Article 8 hereof, sufficient B containing therein approximately C units of D and E units of F per month."

Do you know what the "F" referred to?

A. Yes, you refreshed my memory. That is just what I told you. The F was vanadium in the ore, not in the—not in any concentrate. This is simply an ore transaction, contained, and has nothing to do with fused oxide.

Mr. Archer: (Reading)

"(b) The Government shall pay to the Contractor the sum of \$1.10 per G unit for the D contained in the B and thirty cents per G unit for the F contained in the B."

Do you know what the "B" was?

- A. Yes, I do. [453]
- Q. That's the sludge?
- A. One of the sludges.
- Q. And the F refers to V₂O₅?
- A. That's right.
- Q. Well, at any time did the United States

Vanadium Corporation process the sludge for vanadium oxide for the United States Army?

A. They did during this period, in accordance with this contract.

Q. In producing--

A. On that part of the sludge that was produced under this contract. Of course, there was sludge produced outside of this contract.

- Q. That's right. But I am talking—I am speaking of the sludge produced under these contracts, was subsequently converted into vanadium oxide, the fused black, in other words, for the account of the United States Army, was it not?
 - A. That's right.
- Q. Do you know how many million pounds that was?
- A. Approximately one million nine hundred and some thousand pounds.
 - Q. Close to two million pounds?
 - A. Close to it.
- Q. Returning now to the Union Mines operation in acquiring claims in the Colorado Plateau—
- A. Just a minute, Mr. Archer. Are you aware of the fact that that vanadium quantity is directly tied to the uranium quantity that went into the atomic bomb?
- Q. This, Mr. Burwell, this figure has already been put into evidence by Mr. Alioto, in an exhibit to which I objected, and to which you—
 - A. All right. It really has nothing to do with

this trial, but I just, as a matter of—excuse my interruption.

The Court: None of that is likely to explode around here?

A. Well, it's a dead issue now, your Honot, because all this has currently been released, because we have so much of it. In fact, the miners are worrying that they can't continue to produce uranium for the government right now. So it's really a dead issue at the moment, outside of security for the past.

- Q. (By Mr. Archer): In your operations under the Union Mines contract did you come in contact with a man named Major Canfield Hadlock?
 - A. Hadlock?
 - Q. Yes. A. I believe so.
- Q. Do you remember a Lieutenant Joseph Volpe? A. Joseph Balbe?
 - Q. Volpe (spelling) V-o-l-p-e. [455]
 - A. Yes. I think he was a security officer.

Mr. Archer: That's correct.

The Court: We will take about a ten-minute recess.

(Short recess taken.)

Q. (By Mr. Archer): Mr. Burwell, I have a document here, and I am not sure whether you can identify it or not. It is a copy of a letter from Mr. Canfield Hadlock, U. S. Engineers Office, Madison Square Area, New York, New York, May 5, 1944, to the Area Engineer, Colorado Area, Grand Junction, Colorado.

Were you familiar with the United States Engineers Office, Madison Square Area, New York, New York?

A. That is right.

Q. What was there?

A. Well, that is where they got the name "Manhattan District" from. It was an office in New York, one of the sub-offices of the Manhattan District, Army Engineers.

Q. (By the Court): You mean a governmental

office! A. That is right.

Q. (By Mr. Archer): I wonder if you can identify this letter?

A. Yes, I identify the letter, and also I furnished the information to Mr. Hadlock.

Mr. Archer: I offer this in evidence as defendants' exhibit next in order.

Mr. Alioto: Now, that is a letter from one government official to another government official, and not to this witness, and not to anybody in the United States Vanadium [456] Corporation?

Q. (By Mr. Archer): Was a copy of that furnished to the Union Mines Development Company, Mr. Burwell!

A. No, not the Union Mines Development Company. They were not involved in this at all.

Mr. Alioto: It is manifestly hearsay, if your Honor please.

Q. (By the Court): To whom was it delivered?

A. This letter was delivered to—let me see the letter, your Honor—this letter was delivered to the office of the Manhattan District in New York City,

from one of their officers, who I think was also in New York City. This was an inter-office communication between one office and another in the same building.

Q. You say you furnished the information?

A. That is correct. This letter involved matters out West as tailings, and I furnished the information which was the basis of this letter.

The Court: The objection is overruled. Exception.

(The letter referred to was thereupon marked Defendant U Exhibit Y in evidence.) Mr. Archer: The letter is dated May 5, 1944. It states (reading):

"With reference to Paragraph 1 (e) of your second endorsement, this office concurs with the proposed plan to purchase the 1,000 tons of tailings owned by Mr. Hayes Wilson located at the Gateway mill provided that prior to purchase you investigate and find that the material can be processed in the Colorado plant in spite of the earth content. We presume that your purchase price will be governed by the prices paid previously for the Metals Reserve portion of the Gateway tailings.

"With reference to Paragraph 2 of your second endorsement this office concurs in your recommendations to purchase Blanding tailings for processing at Durango. However, prior to purchase will you please advise this office as to the contents of the tailings and the terms under which the purchase will be made?"

- Q. (By Mr. Archer): Mr. Burwell, did the United States Vanadium Corporation process the tailings from the Gateway mill for the United States? A. It did.
- Q. Did they process the tailings from the Blanding mines for the United States?

A. It did. [458]

- Q. They also processed the Metals Reserve tailings which were located at the Gateway mill for the United States, did they not?
 - A. It did.
- Q. Do you recall, Mr. Burwell, that the Union Mines Development Corporation, in addition to acquiring claims, also made locations—I mean actually purchasing property—they also made locations on the Colorado Plateau for carnotite and related ores?
- A. They probably did. I believe they did in some localities.
- Q. Do you recall that in order to conceal the precise nature of this operation, that part of it was done for the account of the Metals Reserve Company, even after they had terminated their vanadium program?
 - A. I do not recall that detail. It is possible.
- Q. I will show you a letter dated July 3, 1944, from the Metals Reserve Company to the Union Mines Development Corporation signed by Mr. Van Fleet, and I ask you whether you can identify that.
 - A. Yes, I can identify it.
 - Q. Do you recall this transaction?

A. That is correct, I do.

Mr. Archer: I offer this as defendants' exhibit next in order.

Mr. Alioto: No objection, Mr. Archer.

(The letter referred to was thereupon marked Defendant U Exhibit Z in evidence.)
[See Book of Exhibits.]

Mr. Archer: Letter agreement dated July 3, 1944, between the Metals Reserve Company, signed by Charles P. Henderson, President, Washington, D.C., to the Union Mines Development Corporation, 30 East 42nd Street, New York, signed by Mr. Van Fleet (reading):

"Reference is made to Exploration and Development Contract No. W-7415 Eng-78, effective as of the 11th day of May, 1943, between the United States of America, hereinafter called the government, represented by the contracting officer.

"In aid of the war effort of said contract you are hereby authorized by us to locate on public domain lands in the so-called Colorado Plateau area, within the States of Wyoming, Colorado, New Mexico and Utah, mining claims containing carnotite and related ores subject to the following conditions:

"Al! locations shall be made in your own name and shal! be made on our behalf, and it is expressly understood and agreed that any and all title acquired by you shall be transferred to our name or to the name of our nominee upon our request. The mining claims located pursuant to this authorization shall [460] be only such claims as you shall be

authorized to locate by the government acting through the contracting officer as provided in Section 2 (c) of Article 1 (a) in Title 1 of the said contract."

- Q. (By Mr. Archer): The contract referred to is the contract in evidence here between Union Mines and the Army!
 - A. That is correct.
- Q. To finish that transaction, Mr. Burwell, I show you a copy of a letter dated May 20, 1947, from Emerson Levinson, Executive Director, Office of Metals Reserve, to Union Mines, attention Mr. J. R. Van Fleet, and ask you whether you can identify that letter. A. I can.

Mr. Archer: I offer this in evidence as defendants' exhibit next in order, your Honor.

Mr. Alioto: We have no objection.

(The letter referred to was thereupon marked Defendant U Exhibit 2-A in evidence.)
[See Book of Exhibits.]

Mr. Archer: This letter is dated May 20, 1947, from the Metals Reserve to Union Mines (read-

ing):

"Reference is made to letter-agreement dated July 3, 1944, between Union Mines Development Corporation and Metals Reserve Company, and to Exploration and Development Contract No. W-7415 Eng-78, [461] effective as of the 11th day of May, 1948, between the United States of America themselves.

"As you know, pursuant to Public Law 109, 79th

Congress, approved June 30, 1945, Metals Reserve Company was dissolved effective July 1, 1945, and all its functions, powers, duties and authority, together with all its documents, books of account, records, assets and liabilities of every kind and nature, were transferred to Reconstruction Finance Corporation, to be performed, exercised and administered by that corporation in the same manner and to the same extent in effect as if originally vested in Reconstruction Finance Corporation.

"Under date of May 1, 1947, we received a letter from Hon. David E. Lillienthal, Chairman, United States Atomic Energy Commission, informing us the contract was transferred to the Atomic Energy Commission pursuant to Executive Order No. 9816, dated December 31, 1946, and requesting that Union Mines Development Corporation be instructed to transfer to the United States of America those mining claims acquired by it under said contract and held for and on behalf of Metals Reserve Company pursuant to said letter-agreement dated July 3, 1944.

"The Commission is arranging for the preparation [462] of the necessary transfer instruments. Please, therefore, transfer to the United States of America, our nominee, all mining claims acquired by you under said letter-agreement dated July 3, 1944. You will please contact the Atomic Energy Commission, which will prepare the necessary transfer instruments. We are forwarding a copy of this letter to the Atomic Energy Commission."

Q. (By Mr. Archer): And those claims were transferred, were they not, Mr. Burwell, to the Atomic Energy Commission?

A. They eventually were transferred to the

United States Vanadium Corporation.

Q. The Metals Reserve claims? A. Yes.

Q. How was that accomplished?

A. Through the Atomic Energy Commission. In other words, the Atomic Energy Commission took title, and then turned them over to United States Vanadium Corporation as a part of another document that you have not read.

The full story, to answer your question fully, and so there could not be any confusion, the transaction of the acquisition of claims to properties was made under the Army contract. Under that contract these properties were acquired. Later on they were transferred to the Atomic Energy Commission. [463] A related part of the Army transaction was that the United States Vanadium Corporation would have the right to mine or use the claims in the future if they so desired.

- Q. For the Atomic Energy Commission?
- A. No; for their own account.
- Q. Is that what the contract says?
- A. That is what happened. The United States Vanadium Corporation today is mining some of these claims.
 - Q. For the Atomic Energy Commission?
 - A. Mining them today.
 - Q. For the Atomic Energy Commission?

A. No. Well, they are mining for the production of vanadium and uranium ore under a lease arrangement with the Atomic Energy Commission.

Q. That is what I meant.

A. That is correct.

Q. The basic ownership is still in the Atomic Energy Commission?

A. That is correct.

Mr. Alioto: I do not know what you mean by "basic ownership."

Q. (By Mr. Archer): The fee is in the Atomic Energy Commission, and the United States Vanadium Corporation is mining them under a lease arrangement with the Atomic Energy Commission?

A. I think that is correct.

Mr. Alioto: Do you have those leases, Mr. Archer?

Mr. Archer: No, I do not.

Your Honor, you will recall yesterday Mr. Alioto asked me for these letters on the termination. I found the letter referred to in the agreement, and I found one other letter. It indicates there is another letter referred to, October 22, but I do not have that, but these two I will ask Mr. Burwell to identify now.

Mr. Alioto: Where is the one of October 22nd that was an attachment to this?

Mr. Archer: As I say, I do not have it. I may have it at the office. But this is the one you asked for yesterday, November 19th.

Mr. Alioto: That is correct.

We have no objection to that going right into evidence. You do not have to qualify it. Just put it in.

Mr. Archer: I guess they should be marked separately.

First is a letter dated October 25, 1943, from G. Donald Emigh to J. R. Van Fleet.

Mr. Alioto: I have not seen this one, yet. It doesn't make any difference.

Mr. Archer: And as the next exhibit, a letter dated November 19, 1943, from G. Donald Emigh to Metals [465] Reserve Company.

Mr. Alioto: I have no objection to either one of these letters going in.

(The letter of Oct. 25, 1943, was thereupon marked Defendant U Exhibit 2-B in evidence.)

(The letter of Nov. 19, 1943, was thereupon marked Defendant U Exhibit 2-C in evidence.)

Mr. Archer: The first is dated October 25, 1943, Mr. Emigh to Mr. Van Fleet, copy to Mr. Burwell. Inasmuch as counsel requested these, I will read them in their entirety.

Q. (By Mr. Archer): Would you review again who Mr. Emigh was?

A. He was an engineer employed by United States Vanadium Corporation.

Q. (By the Court): What is the date of this letter? A. October 25, 1943.

Mr. Archer (reading): "On October 14th, Metals

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Reserve Company called me to Washington to discuss a curtailment program on their vanadium operation in Colorado. They informed us that in view of the 'easy' vanadium situation they wished to present at once to War Production Board their recommendations that Metals Reserve Company activities in vanadium be curtailed. [466]

"They asked me whether it would not be advisable to send one of their men such as Mr. Jorelamon to Colorado to investigate the situation and recommend a curtailment program. I informed them I thought this was unnecessary and that we would have no objection to recommending a curtailment program if they so desire. By their letter of October 20th they informed us in writing that they thought it desirable to present to the War Production Board a program of curtailment on the Government's activities in vanadium production. Their letter also stated that they would like us to prepare a recommended outline of the procedure for curtailment.

"It is Metals Reserve Company's opinion, so expressed to me verbaily, in our meeting of October 14th, that they should take steps to stop all vanadium ore purchases and deplete present stockpiles of ore. They are, of course, conversant with the Army's interest in this ore and believe that if the Army wants the production to continue it should make arrangements through the War Production Board either to take over the entire operation of ore buying and ore treatment in Colorado, or make

(Testimony of Blair Burwell.) special arrangements to have Metals Reserve Company continue its present operations. So far as the Army work is [467] concerned, Metals Reserve Company have no official knowledge or any instructions and must, until this condition is changed, view their operations in the light of vanadium production alone.

"I have written Johnny Hill asking him to prepare a report on how he believes the present vanadium operations should be curtailed, after he has discussed the situation with Mr. Burwell. By the time you have this letter, you will have had access to Johnny's report and will probably have dis-

cussed the situation with Mr. Burwell.

"In replying to Metals Reserve Company's letter of October 20th asking for our prompt comments. I have stated that we are giving serious consideration to their request for our recommended program and that you will take the matter up with them on your return from the West."

Exhibit C. November 19, 1943, from Mr. Emigh of United States Vanadium Corporation, to Metals Reserve Compacy, attention Mr. H. DeWitt Smith, Re: Program for Curtailing Vanadium Production

(reading):

"Gentlemen:

"In your letter of October 20th you asked us to prepare an outline of the procedure which we would recommend for curtailing vanadium production. You [468] state this curtailment may be desirable in the near future because of the present favorable

situation of production to consumption. You indicate that such a curtailment program would involve:

"First: the shut-down of the Garfield operation.

"Second: cancellation of the Nisley Wilson contract.

"Third: cessation of purchases from V.C.A. operated mines.

"Fourth: cessation of purchases from properties operated at a delivered cost in excess of 65 cents per pound of contained V_2O_5 f.o.b. Monticello or Durango.

"Attached to this letter is copy of a report dated October 22, 1943, by our Mr. John W. Hill. Mr. Hill's report is an analysis of the present vanadium ore situation as regards ore purchased for Metals Reserve Company. The report is not a recommended method of curtailment, but shows how a curtailment program could be initiated along the lines requested in your letter of October 20th.

"Our recommended program for curtailment differs somewhat from the four points brought up in your letter of October 20th. We cannot recommend that all purchases from V.C.A. operated mines be stopped or [469] that we cease purchasing ore the delivered cost of which at Monticello or Durango exceeds 65 cents per pound of contained V₂O₅. It is our recommendation that a gradual curtailment program be adopted allowing production of ore to gradually die out as mines become depleted, until monthly purchases are so small that all ore purchases can be finally stopped. Such a

program would extend over the winter months and probably next summer. It would involve, on our part, the following policy:

"(1) Cease negotiations for new ore purchase

agreements.

"(2) Freeze the present ore prices.

"(3) Discontinue all forms of development including diamond drilling.

"(4) Stop making advances against ore produc-

tion.

"(5) Stop any other form of encouragement such as requesting draft deferment for miners, et cetera.

"The program could be further implemented by

"First, Ceasing operations at the Garfield Mine because the ore is low-grade and distant from Agency plants.

"Second, Cease purchases of roscoelite ores in

the Placerville District.

"Third, Terminate the Nisley-Wilson Agreement on [470] January 1, 1944.

"If, in Metals Reserve Company's opinion, a curtailment program must be such as to consummate operations more quickly, we suggest and recommend that all ore producers be given sixty days notice that Metals Reserve Company ore purchasing will cease on a certain date. In this matter all ore producers would be given the same treatment regardless of the existence or non-existence of ore purchase agreements.

"In making the above recommendations we have

in mind that the ore producers have gone to considerable effort in time, money and work to produce ore which they believed was vital and necessary for successful prosecution of the War and, to the best of our knowledge, they have not made any substantial profits. In view of these circumstances we believe that all ore producers should be treated the same in any curtailment program."

- Q. (By Mr. Archer): Mr. Burwell, referring again to the Union Mines operation, you recall, do you not, that one of the large independent owners of uranium and vanadium bearing resources in the Colorado Plateau in the period 1933 to 1946 was a company known as Wade & Curran? [471]
- A. Well, I wouldn't qualify them as to size, Mr. Archer. They were one of them. They were not one of the large ones. They were substantial.
 - Q. They were substantial?
 - A. That is right.
 - Q. Over on the Navajo Indian Reservation?
 - A. That is correct.
- Q. Did you participate in the acquisition of the Wade & Curran holdings for the Union Mines?
 - A. I did. [472]
 - Q. Were they acquired for Union Mines?
 - A. They were.
 - Q. Were they acquired for Union Mines?
- Λ. They were—they were leases, they were not properties—they were leases for the Navajo Indian—

Q. They were government leases on the Navaio— A. Yes.

Q. — Indian Reservation?

A. With the Indians. They were simply leases to work these properties.

Q. And Union Mines acquired those leases from

Wade and Curran? A. That's right.

Q. Do you recall the date that this occurred?

A. I don't. It surely is a matter of record somewhere.

Q. Well, I show you a letter dated November 30, 1943, from Paul L. Guarin. I believe you have already identified him.

A. I haven't, but I will.

Q. To Mr. W. G. Haldane, Mr. R. H. Ridgway. Who is Paul L. Guarin?

A. He was a lieutenant colonel in the Engineers, Army Engineers, attached to the Manhattan District office.

Q. Mr. Haldane worked under you?

A. Yes.

Q. Who is Mr. Ridgway? [473]

A. Mr. Ridgway was project manager for the Union Mines Dévelopment.

Q. (Handing witness letter.)

A. (Examining). That's correct. I can identify the letter.

Mr. Archer: I offer this in evidence as Defendant's Exhibit next in order.

(Letter dated November 30, 1943, Paul L. Guarin to W. G. Haldane and R. H. Ridgway,

"Wade & Curran—U.S.V. Deal, Navajo Reservation, Arizona," received in evidence and marked Defendant Union's Exhibit 2-D.)

Mr. Archer: This is a letter from Paul Guarin to Mr. W. G. Haldane, Union Mines Development Corporation, dated 30 November 1943, re Wade & Curran-U.S.V. Deal, Navajo Reservation, Arizona.

"Confirming my conversation with Mr. Burwell and you of November 27th, it is my understanding that some time during the early part of 1943, Wade & Curran obtained a prospecting lease on Navajo lands totalling approximately 186 square miles which included the right to select not more than 900 acres for retention in the form of a mineral lease, which selection must be made and filed of record with the Indian Agency not later than a certain date, on or about 1 December 1943. [474]

"Further, I understand that Wade and Curran obtained the above deal as a result of its being the successful bidder at the Indian Agency's sale—the price bid by Wade & Curran being \$1000 cash paid at the time the deal was awarded to Wade & Curran and \$4000 cash to be paid on or about 1 September 1943."

It is my understanding that "U.S.V.", that refers to United States Vanadium? A. Right.

Mr. Archer: (Reading)

"Also, it is my understanding that U.S.V. made a sub-deal with Wade & Curran on this property some time during the month of August and previous to the time that Union Mines Development

Corporation did any work on the property and that the Indian Agency later ratified this sub-deal. The essential terms and provisions of the sub-deal, as I understand it, are as follows: (1) U.S.V. paid Wade & Curran \$4000 cash which Wade & Curran in turn paid to the Indian Agency on or before the deadline date in order to comply with its obligations concerning the payment of cash bonus price under the terms of the original deal with the Indian Agency as stated above. (2) U.S.V. obtained from Wade & Curran the right to explore the entire property up to the deadline date, at which time final selection of the 900 acres was to be made, (on or about 1 December 1943). (3) The 900 acres finally selected to be divided-300 acres to Wade & Curran and 600 acres to U.S.V.

"On or about 26 August 1943, and subsequent to the date the sub-deal between U.S.V. and Wade & Curran was made, Union Mines started exploratory work on the property with one field party. A few weeks later the Union Mines' exploratory force working on the property was increased to two field parties and during October the force was still further increased to three field parties. The work being done by Union Mines on the property was inspected by a representative from this office during the early part of November and information so gathered indicates that as of that date, the Union Mines' forces had explored most of the property except a relatively small area on the south end and as a result of this work had discovered

a number of mineral deposits with attractive possibilities. Also, arrangements were then being made to explore the rest of the property during the latter part of November and before the deadline date for selection of the 900 acres to be retained by Wade & Curran and U.S.V.

"After Union Mines began work on the property, [476] Mr. Van Fleet, on several occasions, advised the writer and his associates about the existence of the U.S.V. and Wade & Curran subdeal and said that the matter when it first came up between U.S.V. and Wade & Curran required quick action which prevented any earlier discussions on the subject. He also said that U.S.V. entered into the deal primarily for the benefit of Union Mines in order to facilitate its work on the Navajo Indian Reservation and suggested that arrangements could probably be made for Union Mines to acquire all of U.S.V.'s interest in the deal by reimbursing U.S.V. for the actual expense it had incurred if it were deemed advisable for Union Mines to make such an acquisition.

"In view of the circumstances as explained in the foregoing and because the deadline date for making the final selection of the 900 acres to be retained has now arrived, it is believed advisable at this time to come to a definite conclusion regarding the property ownership policy matters involved between U.S.V. and Union Mines. Before making such a decision, however, it is necessary to thoroughly consider all of the factors involved, and (Testimony of Blair Burwell.) in order to do this it is requested that additional information be furnished to this office . . ." And he states what information he wants.

Subsequently U.S.V. transferred its interest to Union Mines, did it not, Mr. Burwell?

A. Right.

(Discussion between counsel.)

Q. (By Mr. Archer): I will now show you a copy of a letter from John W. Hill to Mr. Van Fleet, copy to Mr. Burwell, Mr. Emigh, dated October 30, 1943, and ask whether you can identify it.

Mr. Alioto: You don't have to identify that. Just put it in, if you want to.

Mr. Archer: Offer this as Defendant's Exhibit next in order.

(Letter October 30, 1943, John W. Hill to Mr. J. R. Van Fleet, received in evidence and marked Defendant Union's Exhibit 2-E.)

Mr. Archer: This is a letter from John W. Hill to Mr. Van Fleet—I will just read the first and last paragraphs. If somebody else wants to read some more, it's all right.

This is dated October 30, 1943.

Q. And John Hill at this time was directing the Metals Reserve program from Durango, is that not correct?

A. No, he was supervising engineer for Grand Junction.

Q. From Grand Junction?

A. That's right.

Q. And this was prior to the termination of the Metals Reserve vanadium program, October 30, 1943?

A. I presume so. The date speaks for itself.

Mr. Archer: (Reading)

"Dear Mr. Van Fleet:

"I am herewith submitting a report for your approval and transmittal as requested by H. De-Witt Smith, Vice-President of Metals Reserve Company, on October 20, 1943, concerning the curtailment of vanadium production."

Then I skip.

"The Moab ores contain an appreciable quantity of U_3O_8 and should be transferred to the Durango Plant for this reason. The Wade, Curran ores are also high in U_3O_8 .

Q. Those are the ores we have just referred to, is that not correct, Mr. Burwell?

A. Right.

Q. And U:Os refers to uranium oxide?

A. That's right.

Mr. Archer: (Reading)

"In the attached report, under Durango Ore Supply, it is stated that F. A. Sitton and North Continent Mines, delivering ore to the Dove Creek receiving station, [479] do not have an Ore Purchase Agreement, and their purchases could be terminated immediately. The loss of these two producers to the Durango Plant would seriously affect the U₂O₈ production as these producers are the principal sources of the U₂O₈ to the Durango Plant at this time."

The Court: At this time we will recess until 2:00 o'clock.

(Thereupon a recess was taken until 2:00 o'clock p.m.) [480]

Thursday, June 5, 1958, 2:00 O'Clock P.M.

(The witness Blair Burwell thereupon resumed the witness stand.)

Cross-Examination—(Resumed)

- Q. (By Mr. Archer): Mr. Burwell, I believe when we finished just before noon I had just read a letter from Mr. Hill in which he stated that the North Continent Mines were one of the suppliers of uranium-bearing ores to the Durango plant, do you recall that?

 A. I do.
- Q. They had been supplying the Durango plant under the Metals Reserve program, had they not?
 - A. Yes.
- Q. Shortly after that, this letter—well, in 1943, then the Metals Reserve program was terminated, was it not, or shortly thereafter?
 - A. I believe that's right.
- Q. Were you aware of the fact that in 1943 that the North Continent Mines had shut down their oxide plant out in Colorado?
 - A. I believe that's correct.
- Q. And weren't you aware of the fact that the reason they shut down was because the Securities Exchange Commission had ordered them to do so?
 - A. No. [481] ..

- Q. Didn't you hire Slim Lundquist, who had been operating that plant? A. Yes.
- Q. And he didn't tell you then that the reason they closed down was because the Securities Exchange Commission had told them to get out of the oxide business?
 - A. No, I don't recall that.
- Q. Well, you do recall, however, that in 1944 the Union Mines Development Corporation acquired the North Continent properties for the Manhattan project?
 - A. I knew that distinctly.
- Q. I show you a letter dated August 5, 1944, from yourself to Paul L. Cuarin regarding this and ask if you can identify the letter (handing to witness).

Mr. Alioto: If it is merely authenticity, you don't have to waste time on that.

Mr. Archer: I offer as defendant's exhibit next in order a letter dated August 5, 1944, from Mr. Burwell to Mr. Guarin.

Mr. Alioto: We have no objection to the introduction of that letter.

The Clerk: Defendant's Union Exhibit 2F admitted and filed in evidence.

(Whereupon, letter dated August 5, 1944, Burwell to Guarin, was received in evidence and marked Defendant's Union Exhibit 2F.)

Mr. Archer: This is a letter dated August 5, 1944, from Blair Burwell, Union Mines Develop-

(Testimony of Blair Burwell.) ment Corporation, to Paul L. Guarin, Major, Corps of Engineers.

"Proposal for the Acquisition of Property of

North Continent Mines, Inc.

"Dear Sir:

"You have been furnished a report on the property of the North Continent Mines, Inc. by W. E. Haldane. This report covers the mining property and improvements of the North Continent Mines, Inc. located at Slick Rock, Colorado.

"This property consists of a well-located group of carnotite mining claims, a mill installation, housing and other facilities more completely listed

in the accompanying report.

"On this property, as covered by the report, there is estimated to be 68,250 tons of indicated ore, and 65,000 tons of inferred ore containing .25% U.Os. There also exist large, favorable, mineralized areas on which no development has been done but in which we believe additional ore can be developed. The property can be purchased for a cash consideration of \$200,000.

"I recommend the purchase of the property for this amount for the following reason: [483]

"The amount of ore indicated and inferred, together with the physical assets justify the purchase price. The property occupies a strategic position in the mineral district and will enable adjoining areas to be acquired and developed economically.

"Request for formal approval for this purchase

is made.

"If the contracting officer, or his authorized representative approves, please so indicate by signing this letter in the lower left-hand corner.

"Yours very truly,

"Union Mines Development Corp.

"Blair Burwell."

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Then "Approved for the Contracting Officer (signed) Paul L. Guarin, August 5, 1944."

And pursuant to your recommendation, those properties were then acquired, were they not?

A. That's right.

- Q. I believe you have already testified that during the period of the Metals Reserve Company operations that the Calamity and Outlaw claims, which had been mined by Molybdenum Corporation of America and then Brown and Bowman and which you had mined for a year or which U. S. Vanadium had mined for a year, were leased from the trustee in bankruptey of the old Gateways Alloys Corporation and their proceeds used for the [484] Nisley and Wilson mill?
 - A. That's correct.
- Q. Now, after the termination of the Metals Reserve program, those properties were also acquired for Union Mines, were they not?
 - A. They were.
- Q. And one of the reasons for acquiring these properties was because it was a good engineering and economical thing to do for the Manhattan project, isn't that right?
 - A. I shouldn't split hairs over definitions in an-

swering your question, Mr. Archer. There wasn't really an economic reason that had anything to do with the Manhattan District. They were a defense—a bomb job—and they didn't have any economics.

Q. Then good engineering?

A. There wasn't an engineering reason, no.

Q. Well, it was to accomplish----

A. There was a good policy—policy reason—put it that way, for acquiring that. That had to do with the Manhattan District's reason for existence.

Q. And one of the reasons, also, was to keep out some of these "promoters" that you have referred to which the Army did not desire to operate the properties, isn't that correct?

A. It might be loosely termed that way.

Q. Mr. Burwell, I believe yesterday or maybe it was the [485] day before, in your testimony, your previous testimony, you referred to a conversation you had in 1940 with Mr. Strodd and Mr. Fleck of the Vitro Chemical Company. I believe that it is in Pittsburgh?

A. Yes, that's right.

Q. And the substance of this conversation was that they had been using fused oxide for some of their coloring operations and you had suggested they use red cake?

A. That is what they advised me they had been using, fused oxide, and I advised them to use red cake.

Q. After that you had a conversation, just following that, with Mr. Dutot and Mr. Ford?

A. That is my best recollection.

- A. No. I think I stated that Mr. Strodd and Mr. Fleck stated that they had acquired their fused oxide from V.C.A. But they were a V.C.A. customer.
- Q. Well, my question is, as a matter of fact, hadn't Vitro been a customer of Electromet prior to 1940 and hadn't Electromet sold them red cake prior to 1940? A. No, I don't recall.
- Q. Well, I show you what has been marked as Plaintiff's Exhibit 16 in this action—— [486]

Mr. Alioto: What are you going to do, what are you going to call his attention to?

* A. (Witness examining)

Q. (By Mr. Archer): Notice, Mr. Burwell, this is a list of purchasers of vanadium products from Union Carbide, and I invite your attention to Page 8, the name Vitro Manufacturing Company. You will notice that in the dates of purchase they have an asterisk under the year, and ask you what years are indicated there after "Vitro Manufacturing Company"?

A. (Witness examining)

Mr. Alioto: Counsel, you can read those directly. I have no objection to that. It is in evidence. You can show the years involved.

Mr. Archer: Oh, I'm sorry, Mr. Burwell.

It shows here, Mr. Burwell, that the Vitro-

(Testimony of Blair Burwell.) that Union Carbide was selling vanadium products to Vitro in '38, '39 and '40.

Does that refresh your recollection as to whether they had been a customer of Union Carbide prior to your visit and talk with Mr. Ford—I mean, with Mr. Fleck and Mr. Strodd?

A. I don't recall sales prior to that. My time and testimony involved a visit, there. It could have been they bought small amounts of oxide prior to that. But no great quantity.

Mr. Alioto: That doesn't indicate they bought [487] red cake, though, Mr. Archer, does it?

Mr. Archer: I have here the sales-

Mr. Alioto: Excuse me, your Honor-

The Witness: I think they bought vanadium oxide in sludges—in material in combination with uranium.

Mr Alioto: If your Honor please, I don't think Mr. Archer wants to leave any misimpression here. I think you asked him first whether they in fact bought red cake prior to the time and then you——

Mr. Archer: No; this is my examination, Mr. Alioto.

Mr. Alioto: I understand. I'm going to object, if your Honor please.

The Court: Just a minute.

What is your question? State your question and then make your objection.

Q. (By Mr. Archer): Mr. Burwell, I now show you the sales record of Union Carbide with Vitro Manufacturing Company, showing sales for '38,

'39 and '40 and later years and the indication of sales of products up at the top (handing to witness). See whether you can identify that.

- A. (Witness examining) I can only identify this as a sheet that is apparently taken from some—from the sales of—I can't identify it.
 - Q. You can't identify that?
- A. There is no corporate name on it or reference. [488]
- Q. I understand that, Mr. Burwell. You didn't have any direct responsibility for sales?
- A. I had nothing to do with that sheet or the sales—I know nothing of it.
- Q. And that wasn't your direct responsibility in the corporation?
- A. No. I was only the—as I mentioned—in '40, I encountered the market. I didn't make the final sale. That went through Electro Metallurgical Company and probably would appear on some sheet similar to that.

Mr. Archer: I have no further questions of this witness at this time. [489]

Cross-Examination

Q. (By Mr. Holland): Your Honor, we weren't in all of these government deals so my examination will be rather short.

As a matter of fact, there was great competitions between Vanadium Corporation and Union Carbide as to who would be the agent for Metals Reserve, was there not?

A. Yes, there was, Mr. Holland.

Q. And Vanadium Corporation was bitterly disappointed that they weren't appointed the agent or, at least, a joint agent, isn't that correct?

A. Yes, there was a conflict between the two

groups as to who would be agent.

Q. And they felt that the agency of Metals Reserve which was secured by Carbide gave them a great advantage, did they not?

A. You mean—speaking of Vanadium Corpora-

tion?

Q. Yes.

A. Well, I couldn't testify as to what they felt about it. I think they were disappointed, though.

Q. But that was simply one of the many instances of bitter competition in the west between the two companies, was it not?

A. Now, that's correct, Mr. Holland, insofar as the mining properties goes, there is no other

record. [490]

- Q. You always considered that you were a bitter competitor of Vanadium Corporation, did you not, when you running the West for Union Carbide?
- A. I believe—why, sure, sure we were, we were bitter competitors with the U. S.—for the Vanadium Corporation in the acquisition of mines, ore deposits.
 - Q. Ores, and everything else, is that correct?
 - A. Everything else, in the field.
 - Q. In the field? A. Yes.

- Q. And now, who established the ore prices that were paid by U. S. Vanadium?
- A. Well, they were originally established, Mr. Holland, as a matter of negotiation, in a few instances some outlying mines to fit the circumstances of length of haul and grade of ore. Most of the negotiations, they kind of grew like Topsy, and finally they came to a definite point of establishment some time later, and I believe my testimony has covered that.
- Q. Now, you were Topsy's papa, weren't you? I mean, you—what the prices were were determined by you, isn't that correct?
- A. Well, basically so. I think, however, that I gave the formula to Mr. Weston and Mr. Haldane to negotiate any price that would result at that time, that is, the cost of vanadium oxide, for approximately the cost to us of mining similar grade of ore. [491]
- Q. But the price you paid was considerably higher than the cost from your own mine, wasn't it?
- A. Well, our own mines, scattered over areas of 70 miles north and south, 20 miles east and west, so some of our mine costs were quite high, and some of them were, within a mile of the plant, were quite low, so we had to average those figures a great deal.
- Q. But the average of those figures would be considerably lower than what you paid the miners for the ore, would it not?
 - A. At the start of the period they were pretty

close to the same figure. At the start of the period we were not buying very much ore and our costs were quite low because we were moving not mined ore but dumps and reserves of pre-mined ore that existed on the surface.

For instance, our costs at the start were approximately \$1.50-\$2.00 a ton for ore and it simply involved picking up mined ore that had been mined ten years before, moving it into the mills.

So it is very difficult to give you an answer on that unless you tell me precisely what area that you want defined.

Q. Well, is that how you got your 40 cents cost because you were processing ore that had been mined years before and that you weren't charging any mining costs against?

A. Our 40-cent cost, Mr. Holland, in '39 or '38 [492] was based upon the average cost and including what ores had been accumulated from prior years and ores that were currently being mined.

Q. It had the advantage of the prior mined ore then, is that correct?

A. It's probable that they did, yes.

Q. And you made the statement, I believe, before today, that you couldn't have maintained a 40-cent cost on purchased ore, isn't that correct—paying 21 cents for your ore, you couldn't maintain a 40-cent cost, didn't you make that statement?

A. Repeat the question again, please. I am a little confused.

Q. I believe you made the statement today that

—or yesterday—that paying 21 cents a pound for purchased ore from the miners, you could not maintain a 40-cent cost, that the 40-cent cost was the result of company-mined ore being used?

- A. Well, I think that is basically the case.
- Q. No, this 21-cent price to the miners—— And when you say "miners" you mean mine owners, don't you?

 A. Mine owners.
- Q. You are not talking about the man that gets in and digs out the ore, necessarily, unless the owner happens to work himself, is that correct?
- A. Well, we had leases operating our own properties, which were in between the miner working has own property and the lessor working a small deposit of our own.
- Q. But when you talk about miners, you are primarily talking about mine owners or leases?
 - A. Independent, outside mines.
 - Q. Independent operators?
 - A. (Witness nods head.)
- Q. And you were paying them in 1940 a 21-cent price, is that correct?
 - A. I believe that's the record, yes.
- Q. I think that is what you told Mr. Bransome, wasn't it?
- A. I think that's right. That was approximately the average price, depending upon the grade of ore.
- Q. And then you made the statement that the miners complained that they weren't being paid a living wage. Was that a correct complaint, a justified complaint?

A. Well, I couldn't recall—on the justice of their complaint, or answer your question. That is what they complained about.

Q. Well, do you think they were right in that

complaint?

A. In some cases, they probably—they probably were.

Q. In other words-

A. It depended upon the individual circumstance. [494]

Q. Well, do you feel that you were actually—when you were in charge of this ore-purchase program—you were paying the miners less than a living wage?

A. Well, we tried to pay the price that we could

buy the ore for.

Q. And you were perfectly willing, being in charge of that program, to pay the miners less than a living wage in order to get cheaper ore, is that correct?

A. We didn't inquire into a living wage when we bought the ore, Mr. Holland.

Q. You didn't care, is that right?

A. Well, we didn't know in a particular case what a living wage was. Probably a great number of these miners that were living in various parts of this country, to determine what each miner's living wage was, was entirely beyond my scope and ability to determine.

Q. And we aren't really talking about wages at

(Testimony of Blair Burwell.)
all, anyway, are we? We are talking about the price
of ore?

- A. We are talking about the price of ore.
- Q. And the question of how much money the particular mine owner made out of the ore that you purchased from him depended primarily on how good ore he had, didn't it?
 - A. How good ore he had.
 - Q. And how accessible it was?
- A. What the grade was, where it was located, and whether [495] it had been, in some cases, mined, pre-mined ore. There was a great deal of ore that was purchased during this program that had been mined ten years before. Radium, for instance. Therefore, the questions of what it cost was academic.
- Q. Then if a man had a good mine, and he was a good operator, he would make money on it, wouldn't he?

 A. Of course.
- Q. You stated that you had a conference in New York with Mr. Bransome in 1940 when he was just starting up Naturita, and you discussed ore prices, what was being paid for ore, is that correct?

 A. That is correct.
- Q. Will you give the exact conversation that occurred as exactly as you can remember it?
- A. I don't know that I can give the exact conversation. That occurred 18 years ago. But I can tell you I already testified as to the general conversation, Mr. Holland.
 - Q. Give it as exactly as you can.

Mr. Alioto: May we establish the persons present, Mr. Holland?

Mr. Holland: You did in the direct testimony.

Q. Who was *present at that conversation?

A. Mr. Bransome, Mr. Van Fleet and myself, and we discussed, as I testified before, the problems of operation, of labor rates, of trucking rates, how much we were paying miners, how much we [496] were paying for truckers, and how much we were paying for ore. Mr. Bransome said he would like to cooperate with us and work out the same basis of payment for these various items, such as labor rates, prices for ore.

Q. Confining yourself to the prices for ore, will you give the conversation on that exactly as you can remember it?

A. I said we were paying approximately 21 cents a pound for V₂O₅ ore based upon two per cent ore amenable to the treatment plants, amenable to the process at the treatment plants, and Mr. Bransome said, "All right," he would follow that price.

O. What did you say after that?

A. Oh, I think I probably said, "That is all right, fine," or something of that sort.

Q. In other words, there was no agreement then to pay a 21-cent price? No one obligated themselves on either side to do it, isn't that correct?

A. The instances that I told him what we were paying. Mr. Bransome said, "We will pay the same rate," and that is all there was to it.

Q. There was no agreement made, isn't that correct? It was just a conversation.

Mr. Alioto: If your Honor please, I think an agreement is a legal conclusion. He has given the substance, two competitors discussing prices. I will object on that ground. [497]

The Court: State your proposition again, will you?

Q. (By Mr. Holland): Then you did not agree yourself to pay a 21-cent price, is that correct?

A. I simply stated that this was what we were paying, 21 cents. I did not make any agreement or any formal writing.

Q. That is right. You have answered the question.

In this meeting in 1942 at Dove Creek in the ore-buying situation, I believe you testified Mr. Bransome, possibly Mr. Kett, possibly Mr. Hill, and yourself, were there, is that correct?

A. Yes, and possibly the ore-buying stationer. That is my best recollection.

• Q. Pardon me. Going back to the 1940 conversation—I will skip the 1942 for a moment—what was it Mr. Bransome said there?

A. "We can't get enough at this 21-cent price to run our plants, and I am telling you we are going to pay 31 cents."

Q. 31 cents?

A. 30 cents, or whatever it was, I said, "All right, we'll pay the same price."

Q. He did not ask you to agree to pay the same price, did he?

A. No. It was the same kind of a conversation

as the earlier one in New York. [498]

Q. As a matter of fact, the 1942 conference came just after U. S. Vanadium had been appointed agent for Metals Reserve, had it not?

A. I think that is the case because we were at a Metals Reserve ore-buying station, or at least that is my recollection.

- Q. Pursuant to that agency, U. S. Vanadium Corporation had been out establishing much higher prices for ore than had theretofore been paid in an attempt to get the marginal ores for the war effort, is that not correct?
 - A. That is correct.
- Q. That necessarily had an effect on the price that was paid by the companies on their own ores, didn't it?

 A. Most certainly.
- Q. And it was as a result of that, was it not, that the price was raised to 31 cents, a direct outcome of that?
- A. Well, Mr. Bransome raised the price to 31 cents. I don't know what his thinking was, other than he said he couldn't get enough ore for his plants, Mr. Holla, d.
- Q. He raised it and then you decided you would raise also, is that correct?
 - A. I said, "We will also raise it to 31 cents."
 - Q. And the time in 1940 when you had this

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498

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- A. Well, Mr. Bransome raised the price to 31 cents. I don't know what his thinking was, other than he said he couldn't get enough ore for his plants, Mr. Holland.
 - Q. He raised it and then you decided you would raise also, is that correct?
 - A. I said, "We will also raise it to 31 cents."
 - Q. And the time in 1940 when you had this

(Testimony of Blair Burwell.) conversation about the 21-cent price, you were buying very little ore, isn't that correct? [499]

- A. A very small proportion of the total ore going into our plants.
 - Q. Less than ten per cent, is that right?
 - A. Less than ten per cent.
- Q. I believe if you had had secure more ore, you would have been perfectly willing to raise your price to get it, would you not?
- A. Why, if we needed more ore to fill our plants and to carry out our objectives, we would have paid the price necessary to get it.
- Q. That is right. Now, this Dry Valley matter. I realize there has been some unpleasantness about that and I want to avoid that if possible.
 - A. I hope we can.
 - Q. I think we can.
 - A. The only reason I am here at this trial—
 - Q. I think we can.

The Dry Valley claims you say you looked at as early as 1931, is that correct?

- A. That is right.
- Q. As a matter of fact, you do not know how early Vanadium Corporation had looked at them, do you?
- A. I have no way of knowing that, Mr. Holland. Vanadium Corporation of America was in that field in 1927 examining the properties on the other side. It is possible that they looked at this field at the same time. [500]

Q. They might even have looked at them before you did, for all you know?

A. Yes. As a matter of fact, I looked at them

before 1931.

Q. But you never considered purchasing them, is that correct, until you had determined that you wanted to build a plant at Monticello?

A. We never considered purchasing until we had an economic reason for purchasing them, either a plant at Monticello, or to move ore to Rifle or to Europe.

Q. Your economic reason that prompted you to do it was the hope that you would get a plant

at Monticello, was it not?

A. That is correct, fundamentally.

Q. Those claims were peculiarly tributory to Monticello, weren't they? That is, the cost of hauling to Monticello was considerably less than hauling anywhere else, any existing plant?

A. Well, there was no existing plant.

Q. I mean any other plant that existed any- where, the closest other plant.

A. The closest other plant was Uravan before

the Monticello plant, Mr. Holland.

Q. But they were important in the war effort for the operation of a plant at Monticello, were they not?

A. Yes, they were important to the war effort.

Q. And forgetting the unpleasantness that went on at the time, after you had acquired the option to purchase these claims, because of internal mat-

ters, the Vanadium Corporation was able to obtain the Monticello plant instead of yourself, is that not correct? A. That is correct.

- Q. As I say, forgetting the internal troubles between the companies, the Dry Valley agreement eventually resulted in the Vanadium Corporation taking those claims over and paying you your cost, is that not correct?
- A. I believe they paid us the cost we had directly in the Dry Valley property, as well as paying us for the vanadium that still remained on the Maggie C. contract.
- Q. Yes, but that was a payment under contract, is that right? A. That is right.
- Q. So by paying your cost, which as I recall was about \$40,000, they were permitted to take them over under the Dry Valley agreement?
 - A. They were permitted to take them-
- Q. Subject to your right to mine them under the Maggie C.?
 - A. I believe that is correct.
- Q. Therefore, in order to get these claims to the Monticello plant for the war effort, this agreement was made, is that correct? [502]
 - A. State that again.
- Q. Primarily to let Vanadium Corporation have these claims so that they could be utilized with the Monticello plant for the war effort, U. S. Vanadium turned them over at their cost, is that correct?
- A. Yes, although at that time the plant at Monticello was a Vanadium Corporation plant.

- Q. I am talking about the vanadium—they were turned by U.S.V. over to the Vanadium Corporation?
- A. For the Monticello plant of the Vanadium Corporation of America.
 - Q. That is correct.
- A. Because at that time Vanadium Corporation of America plant at Monticello was not planned for a government operated plant.
 - Q. But that is what it became, did it not?
- A. It became that at the request of the Vanadium Corporation of America subsequently.
- Q. But it was planned as a supplemental plant to aid the war effort from the very first, was it not?
 - A. That is correct, that is correct.
- Q. And I believe the contract itself shows this thought, because it says,

"Vanadium (which is Vanadium Corporation of America) desires to obtain a larger supply of [503] vanadium ore to enable it to produce vanadium for national defense, and in view of the needs for vanadium of the present emergency, the United States is willing to transfer to Vanadium its rights in said mining claims upon the terms and conditions hereinafter set forth."

Now, who was Arvo Whitaker?

- A. He was a consulting mining engineer, Denver, Colorado.
- Q. Was he not put in the position of a sort of arbitrator and overseer of what went on in every way on the Plateau in connection with ore-buying

and so forth, by the government, because, partially, of the bitter competition between U. S. Vanadium and Vanadium Corporation of America?

- A. Basically you are right, Mr. Holland. In connection with ore buying, ore acquisitions in plants affected by the Vanadium Corporation of America, Mr. Bransome seldom had some disagreements of procedure.
- Q. You always have fought with each other, haven't you?
 - A. Always-not always, I think-
 - Q. Well, 90 per cent of the time?
- A. That is right. Just good clean competition. However, this was set up, to answer your question, Mr. Whitaker was, at more or less the joint request of both companies appointed to settle the matters of ore distribution to the various government ore, or new ore plants, and he was selected as an [504] independent consulting engineer by the government for that purpose.
 - Q. And he did an outstanding job, did he not?
 - A. Yes, he did, as he always does.
- Q. Wasn't he considered one of the great engineers of the country?
- A. Yes, Mr. Whitaker has a very high reputation, especially in lead, zinc, and other branches of mining. He has very little experience in uranium and vanadium, however. His integrity was unquestioned and his fairness was unquestioned in matters of this kind.
 - Q. And his assistant, a man named Paige Ed-

wards, was really doing his leg work for him in the field, is that correct?

- A. Yes, and he did also a splendid job. He is working for you at this time.
- Q. You have always considered, all the time that you were with U. S. Vanadium, you considered Vanadium Corporation as your principal competitor, did you not?

 A. Most certainly.
- Q. And they were the only competitor you were really worried about, isn't that correct? They were the only ones who really gave you a battle, isn't that right?
- A. Well, yes and no. We considered, if you want me to analyze Vanadium Corporation from my viewpoint, as a corporation, it had little or no knowledge of this mining field, but had a strong, a long experience in marketing.
- Q. I am talking about your operations in the West.
- A. So in the field we felt that they were not formidable at all, as formidable as some of the other companies might be who might have gotten started.
- Q. They were the most formidable one you had, though, were they not?
 - A. Probably so, yes.
- Q. And over the years they have proved to be pretty formidable, haven't they?
 - A. Quite so.
- Q. And therefore isn't it a correct statement that when you are worrying about ore claims, oxide,

falling into the hands of competitors, you were all the time thinking primarily, you and Mr. Van Fleet, of the Vanadium Corporation?

A. Well, it is a broader—no, it was broader than that, Mr. Holland. We had a corporate opportunity, policy involved here in which while we were—we had approximately 90 per cent of the accessible ore deposits and the balance of the ore deposits that was accessible probably rested five per cent with Vanadium Corporation of America and maybe five per cent with what we call independent miners.

Now, we were looking ahead at that time to some time when cost-wise we could put in effect the policy that we [506] had started the field with of selling vanadium at a price to expand its usages to use fully the resources of the field. Therefore, our competition was a double-barreled one: Number one, your company, the Vanadium Corporation of America, had experience and was equipped with processing plants but was poorly equipped at the moment with field knowledge.

- Q. It did not have any plant in Colorado until 1940, did it, that is, any operating plant?
 - A. Well, you had a plant in 1934.
 - Q. I say an operating plant.
- A. You had a plant prior to that in the Placerville District which could have been an operating plant if you had known how to operate it.
 - Q. But I say it was not operating, was it?
- A. Whether it is operating or not, you had the facilities.

Q. The first time the Vanadium Corporation really came into this field in a serious way was when they opened the Naturita in 1940, isn't that correct?

A. No.

Q. I am talking about the Colorado Plateau.

A. I am talking about the Colorado Plateau. I wouldn't regard that as correct, Mr. Holland, from my knowledge of the facts.

Q. What would you say?

A. The first time that you seriously went into this [507] field was in 1934, 1933, when you took over the rare metals plant at Naturita.

Q. I believe that was prior to that.

A. Well, whatever it was. It may be 1932. I guess it was prior to that time. But anyway, in those early times.

Q. We shut that down.

A. You tried to operate it a short period of time.

Q. And then we shut down.

A. You shut down because you couldn't operate it, because you didn't have the ore and you did not have the organization to operate it.

Q. That is correct, and from the time we shut it down until 1940, you were alone in the field there, isn't that correct?

A. Yes, but you had the facilities.

Q. We had the facilities but we were not operating, that is the point I make. From the time we shut the rare metals plant down, whenever that was, until 1940, we did not operate in the Plateau, did we?

- A. Why, you had tried to operate in the Plateau and you were unsuccessful.
- Q. That is right, and from the time we were unsuccessful until 1940 we did not operate, isn't state that correct, until we started Naturita?
 - A. That is right. [508]
- Q. And during that period you were alone in the field out there, isn't that right?
- A. That is right, supplying you with vanadium oxide.
- Q. And when you had the policy of buying up claims and trying to produce oxide, wasn't it the Vanadium Corporation of America you were primarily worried about and from whom you were trying to keep the claims and the oxide?
- A. We viewed the control—to answer your question more definitely, we viewed the Vanadium Corporation as primarily one of our principal competitors, but we viewed other ownerships of property and other claim owners, independent owners, as potentially more dangerous or more to be considered as a function of our operation in the future than we did Vanadium Corporation of America, because it was obvious the company that had a million dollars worth of plant setting idle in the middle of an area and a yard full of ore, if they could not operate that at that time, were not greatly to be feared insofar as the production went.

But if some operator such as existed before—see, there were five or six operators operating for vanadium prior to that, and any one of those with good

ownership of ore could have mounted a new plant if they had smart people to do it and knew how to get hold of the mines.

Q. Your answer is very interesting, Mr. Burwell, because I have read you word for word the question I asked you in the [509] Denver case.

Mr. Alioto: Your Honor, I submit that is argumentative. If he wants to impeach him, there is a way of doing that.

The Court: You can ask the question. I see no objection to the question.

Mr. Holland: I read the question word for word from the transcript of the Denver case. Your answer in that case was, "That is correct."

The Witness: It is also correct that you were the principal competitor in this field and one of the big ones, and I also qualified it by saying potentially we regarded other people in the field, old mining areas, undeveloped, such as the North Continent Mines, which had far more ore than the Vanadium Corporation did, or the Gateway area, as potentially important.

Those questions, Mr. Holland, were not asked me, and if you asked me the question—

Q. (By Mr. Holland): I will ask you the question again. I will read it again.

Mr. Alioto: I submit he should not interrupt the witness, if your Honor please.

The Court: It is proper cross-examination.

Q. (By Mr. Holland): I will read you the exact question that I asked you in the Denver case.

I will read the [510] answer and ask you whether or not that was not your testimony in the Denver case:

"Q. And when you had the policy of buying up claims and trying to corral oxide, wasn't it the Vanadium Corporation that you were primarily worried about, and from whom you were trying to keep the claims and the oxide?

"A. That is correct."

Mr. Alioto: What page is that, Mr. Holland?

Mr. Holland: It is page 615.

Q. Did you or did you not so testify in Denver?

A. I believe that is correct.

Q. Now, Mr. Burwell, I would like to go into this question of this process for producing uranium and throwing away the vanadium that you talked about on your direct examination. I believe it was on December 11th, 1947 that you resigned from the Union Carbide organization, is that correct?

A. I think that is correct.

Q. And I believe your testimony was that while you were there at this plant in Grand Junction, which you ran at government expense, you developed a process for extracting the uranium from carnotite and roscoelite ores, throwing the vanadium away in the tailings, is that correct?

A. I wouldn't say throwing the vanadium away in the tailings. [511]

Q. But letting it go into the tailings.

A. Letting it go into the tailings.

- Q. And this you described as an acid leach process, was it?
- A. No, no, I described it as a soda leach process, although there is an acid leach process that does the same thing.
- Q. How does it compare costwise with the process that extracts—first of all, how does it compare with an acid leach process for the extraction of vanadium?
- A. If you will give me a minute, I will give you the exact figures, your Honor. I may take a few minutes because this is a very long paper.
 - Q. I do not want to take the time, Mr. Burwell.
- A. Roughly, with the price of vanadium oxide at 65c, if you gave credit for uranium at a certain price, it was considerably under the 80, 85c a pound cost that I believe existed at that time.
 - Q. Let me get this. What was it that cost 65c?
- A. Sixty-five cents a pound for V₂O₅ would result in the process, providing you gave the credit for uranium at a price, I think, of \$8.00 a pound.
 - Q. Now, this is under your process?
 - A. That is right. [512]
- Q. That is the 65c a pound cost for vanadium oxide?
- A. This was not my process. This was the process—
 - Q. Yes, I understand.
- A. —fathered by the Union Mines, the Manhattan District.
 - Q. But you had acquired knowledge of it; in

fact, you had been primarily concerned with developing it, hadn't you?

- A. That's right. And basically it is a process used at Anaconda today.
 - Q. Where is it used at Anaconda today?
- A. At the Blue Water plant at Anaconda. They use the soda leaching plant.
 - Q. Is that the one near Grants, New Mexico?
 - A. That's right.
- Q. That operates on the ores from Ambrosia Lake? A. That's right.
 - Q. Those ores don't contain vanadium, do they?
 - A. Yes, they do.
 - Q. Not in any appreciable quantity?
- A. Not in any appreciable quantity, but they do contain some vanadium.
 - Q. What percentage?
- A. Oh, from fifteen hundredths to, occasionally, half a per cent.
- Q. In other words, a very small quantity of vanadium in comparison with the carnotite ore?
 - A. That's right, but still significant.
- Q. And that's true of all the ores in the Ambrosia Lake District, is it not?
- A. In the main, they are all low in uranium—vanadium.
 - Q. I'm sorry, I thought you were through.

I believe when you described the Colorado Plateau area, you included the Ambrosia Lake District in it, did you not? A. That's correct.

Q. Did you also include the White Canyon area?

- A. Well, that is part of the Colorado Plateau.
- Q. Where is the map?
- A. It's right here.
- Q. And-
- A. White Canyon is right here in—in here some place.
- Q. Well, now, this line here does not include Ambrosia Lake, does it? A. Well—
 - Q. That is in-out to the east?
- A. This doesn't say Colorado Plateau. This just states uranium mining districts of Western Colorado, Eastern Utah, Northeastern Arizona, Northwestern New Mexico, so it's not—
- Q. I'm not trying to trick you up on the map. I appreciate——
- A. This is, this area in black is part—these are simply mining districts, and whereas this map is made by a commercial [514] company, it is not intended to portray the Colorado Plateau.
- Q. That's right. I understand. But this is the only map we have.

Now, you did include the Ambrosia Lake area which lies to the east in New Mexico?

- A. And geographically it is the same thing. It is—
 - Q. You included the White Canyon area?
 - A. That's right.
- Q. And you included the Marysvale, Utah area. Would that be in the Henry Mountains division there or close to it?
 - A. The Marysvale district is not on the drainage

of the headwaters of the Colorado River, technically, but I think we are splitting hairs whether it is or isn't.

- Q. Then Marysvale would be in it and so would the properties around Moab, Utah, the Steen and Pick properties that have become so celebrated?
 - A. That's right.
- Q. Now, those properties that I have named contain very large reserves of uranium, do they not?
 - A. That's correct.
- Q. The Ambrosia field probably contains more reserves than all the rest put together, is that correct?

 A. Yes, they probably do.
- Q. And you say there is a small quantity of adium in that ore. In the Marysvale area there no vanadium, isn't that correct? [515]
- A. Marysvale area is a different type of ore, it is not a sedimentary type, to the best of my recollection
 - Q. And there is no vanadium in it?
 - A. No, I don't think so.
- Q. That is true also at the White Canyon area, is it?
- A. That's true of certain mines in the White Canyon area.
- Q. And that would be true of the Happy Jack—
- A. Happy Jack, it's true, but there are other mines in the Mare's Tooth, the Cottonwood—which is roughly called the same district—they do contain vanadium.

Q. In other words, the Happy Jack ore is a copper-uranium ore?

A. The Happy Jack is a special mine, a deeper

formation, that carries copper.

Q. A very good one? A. A very good one.

Q. And Steen and Pick, they had a small amount of vanadium, didn't they, in their mine?

A. Well, sometimes they had quite a lot. Some of the ores would run up as high as one per cent.

- Q. But typical of the properties I have named, they run high in uranium and very low in vanadium, isn't that correct?
 - A. High in uranium and low in-

Q. And very low in vanadium.

A. Well, relatively low in vanadium—low and high in lime, [516] which affects the process.

Q. And your process, the process used, you described as particularly adaptable to that type of ore, isn't it?

A. Yes, that's correct.

Q. Because you can throw away the vanadium and forget about it.

A. Well, it puts the vanadium in the tailings or in a form that could later be recovered, if necessary.

Q. And if you are operating on a carnotite ore oody which runs very high in vanadium and comparatively low in uranium, almost universally the vanadium is kept, is precipitated as a separate product, isn't it?

A. Well, not always. Some of the ores of the Colorado Plateau in the uranium area that's being

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(Testimony of Blair Burwell.)

mined for vanadium also, some of those ores are high in lime and have to be treated by a soda ash process—soda ash leaching.

Q. But primarily most of the mills operating on carnotite ores save the vanadium and save it still, don't they?

A. Well, there are—all of them are saving the vanadium, either in tailings or—

- Q. I mean in finished product.
- A. Yes, that's right.
- Q. That is true of the Climax Uranium Mill, isn't it! A. That's true.
 - Q. Where is that located? [517]
 - A. Grand Junction.
- Q. And, as a matter of fact, you personally superintended the construction of that mill, didn't you?

 A. That's right.
- Q. And didn't you acquire some claims for Minerals Engineering, your corporation acquired some claims around the Calamity group?
 - A. We did.
 - Q. In that area?
 - A. There and other places.
- Q. And they are the claims that went in and formed the basis of the Climax Uranium Company?
 - A. They are some of the claims.
 - Q. Some of the claims? A. Yes.
- Q. And for that you obtained or your company obtained a very substantial interest in the Climax Uranium Company?
 - A. We obtained a small interest in it.

Q. About 25%, wasn't it, originally?

A. Originally.

Q. And you were in charge of the construction of that plant, is that right? A. That's right.

O. And you didn't see fit to put this process in

that plant, did you? [518]

A. No, because the ores we had available in that part of the area were low in lime and did not require the soda process.

There are two processes, either of which will recover the vanadium or the uranium head, one or the other. Both processes were patented and turned over to the Climax Uranium Company.

We used either one or the other, depending upon which type of ore we had. If the ores happened to be high in lime, we couldn't use the acid process. If they were low in lime, which they have predominantly, we treated selected ores; we used the acid process.

Q. And produced vanadium oxide, isn't that correct?
A. And produced vanadium oxide.

Q. And sold it to the trade and sold it to the stockpile?

A. And to the Vanadium Corporation of America.

Q. And to the Vanadium Corporation of America, is that correct?

A. That's correct.

Q. Then isn't it a fair statement that—well, I guess you have already made the statement. I won't go into it again.

Now, since leaving Climax Uranium Company,

(Testimony of Blair Burwell.)
you have again gone into the vanadium business
and are a substantial competitor of these defend-

ants, isn't that correct?

A. In the United States?

Q. Well, in the world. [519]

A. Oh, I wouldn't regard it so, Mr. Holland. I think you are overly complimentary. We have, again, a smaller interest in a company that is owned partially by English capital and is shipping into—the company is shipping into European markets.

Q. Aren't you shipping it to the United States also?

A. No, we are not shipping it to the United States.

Q. Are you planning to?

A. No. Never. I don't think we can, on account of the tariff.

Q. Are you in production yet?

A. Yes, we are in production.

Q. Well, I don't want to ask you any business secrets, but you are actually now a competitor in the vanadium business, isn't that correct?

A. Well, competitor of Vanadium Corporation?

Q. Yes.

A. That's a bit complimentary, but when you are dealing with Europe, you are in competition with the Finnish people, the Southwest African people; you are in competition with Norway that is producing vanadium. In Europe, it is only your excess vanadium that is disposed of over there, that you can't sell in the United States.

Q. But that sometimes make a difference between profit and loss, doesn't it?

A. I wouldn't know. That's your end of the business. [520]

Q. Do you use Mr. Leir and his company as one of your sales agents?

A. No. He is not—he has no financial connection.

Q. You have no business dealings with Mr. Leir of any kind? A. That's correct.

Q. Is that correct? A. That's correct.

Q. When I say you, I mean your South African subsidiary company.

A. That's absolutely correct. I have no personal or company connection, financial or otherwise, with Mr. Leir, excepting for the fact that I think Mr. Leir owns some stock in our little company."

Q. Oh, he is a stockholder in you?

A. A small stockholder.

Q. Mr. Leir, and the Rockefellers, also, aren't they?

A. No. Thanks for the compliment. I don't think the Rockefellers are.

Q. I thought they were. I'm sorry.

A. No, they are not.

Q. Well, now, going back to December, 1947, you went first to Mr. Marks Hirsch, is that correct, with this proposition?

A. You are speaking of this conversation in early '47?

Q. I thought you said December of '47, after you left Union Carbide. [521]

A. Well, I think it was in the—I think I stated that it was probably in the first of '48 when that happened.

Q. Yes, you said December of '47 or January of

'48.

A. January, '48. I think it probably was January of '48. Let's see, maybe I can refer to (examining documents). I think it was just prior to January 22, 1948.

Q. You went to see Marks Hirsch, President of Molybdenum Corporation of America, is that correct?

A. That's right.

Q. And will you describe in your own words the proposition you made to him?

A. Yes. I knew Mr. Hirsch, of course as you know, a long period of time in connection—

Q. I don't know Mr. Hirsch.

A. ——in Dry Valley and other vanadium properties, and I explained to him that we were facing a difficult time to the future in regard to the Atomic Energy Program, but that we had prepared as a result of a research program first started by Carbide, taken over by the Manhattan District, to devise a process that would take the vanadium out of the ore first—the uranium out of the ore first and then leave the vanadium in a residue to be turned back for process, and recovered by the owners of the ore; that I had discussed and reported on this matter to the Atomic Energy Commission

and to our own company previous to this, and that this was part of a project [522] that we had carried on, this war effort. It wasn't particularly my—all my contribution; we had dozens of engineers working on this, including the Union Carbide and Carbon Research Corporation.

Q. And Government people also?

A. And Government people also, observing the operation and the test work.

And it appeared that the only way that we could compose the warring differences of the vanadium industry and prevent a limitation of uranium production in the future was to get some operator of a plant or a central plant who was independent of either the Vanadium Corporation of America or the U. S. Vanadium Corporation, because we had got to the top of policy determination, both internal within the Union Carbide and apparently with other people, and that it was necessary for somebody who didn't have an interest to act fairly for everybody in the field, and that I had thought and recommended the Molybdenum Corporation of America might be a good company to do it.

Q. Pardon me, Mr. Burwell. To whom did you make that recommendation? A. Marks Hirsch.

Q. To whom did you make the recommendation?

A. Of this-?

Q. Of Molybdenum Corporation as being the logical operator?

A. I believe I did that to the Atomic Energy Commission [523] prior to—

Q. Were you acting as sort of a representative of the Atomic Energy Commission in an endeavor to put—

A. No, I was simply called in at that time—at the time that the Atomic Energy Commission was being formed, to submit recommendations and plans for the development of the Colorado Plateau.

Q. And this was one of your recommendations?

A. That was one of my recommendations, and the same recommendation had been conveyed to Mr. Rafferty and Mr. Van Fleet before. I think I had some correspondence.

Q. But you made this recommendation to the Atomic Energy Commission, is that correct?

The Cour: At this time we will take a 10-minute recess.

(Short recess taken.) [524]

Q. (By Mr. Holland): Mr. Burwell, is it a correct statement that at the time you approached March Hearst with this proposition you were more or less acting in accordance with the instructions of the Atomic Energy Commission?

A. No, I was really acting on my own in this connection. I was carrying out recommendations, however, of the Union Carbide, and my group in Union Carbide—Mr. Rafferty, Mr. Van Fleet, and myself—had previously conveyed to the Manhattan District as a solution of this particular problem.

Q. Who owned this process?

A. As it exists now, nobody owns it.

Q. Who owned it then, in 1947?

- A. Nobody owned it.
- Q. Was it a perfectly open and public process?
- A. That is correct.
- Q. Everybody knew about it?
- A. That is correct. Well, I wouldn't say everybody knew about it.
 - Q. Had it been published?
 - A. I couldn't say. I don't think so.
- Q. If you have a reasonably high vanadium ove wouldn't it be better to produce the finished product under your process than just to put it in the tailings and leave it there?
- A. That would be true, if you could dispose of your [525] vanadium in a finished product. But here is the problem that confronted us, Mr. Holland: that at the time in 1946 that I was talking about we had completed most of the Manhattan District job and the bomb job. In other words, it had become an accomplished fact. And in order to make the bomb succeed and to fill the pipeline that was required at Oak Ridge and at Hanford, it took so many million pounds of uranium metal, far beyond the capacity of the Colorado Plateau or any other mining district to produce currently at that time. But because there had been a 20-year accumulation of uranium ores from the mining of vanadium, not only here, but in Shinkolobwe, Africa, the jungles of Africa, where they had left the area, and up in Canada at the El Dorado Mine, which was shut down, and the same thing was true of the mines in the jungles of Africa-they were shut

down and full of water when we started this project—we accumulated and harvested 20 years of mining and got enough uranium to fill the pipeline, without which we never would have succeeded in the Atomic Energy Program.

Now, therefore, it took approximately, oh-I am a little cantious on security on this thing-so many million pounds a year to continue the program of sufficient size to make sure that we would survive in the time of danger following the war. In other words, we gathered in all the 20 years of past stuff. the bomb was finished, the Manhattan District [526] had taken its hat off the book and walked out the door, and there was confusion about the future policy of this field. We knew that if we returned to the problem of producing uranium as a part of vanadium, and the question you just asked, Why don't you produce the vanadium directly?-if we produced the uranium that came from the vanadium in tune with the vanadium market sales, which we were afraid of, we would have approximately, from the vanadium sales limitation, we would have approximately one-tenth of the uranium that we needed to survive as a nation after this war.

Therefore,—and that was an essential part of our Manhattan District job—we had to prepare for a future program on this Colorado Plateau independent of the companies' interest, independent of the Vanadium interest, independent of Mr. Leir's interest, independent of the thinking of Mr. Bransome, or even myself. And we prepared a program

of getting uranium in the future independent of the vanadium industry.

Well, if the vanadium industry found a way to sell their vanadium by reducing the price, and the cost of mining of the ore and the grading of it and the hauling into the plant was borne by the government for uranium, and only that amount of vanadium was produced as the market would absorb, obviously we had a safe formula for the future.

Now, here was the place, Mr. Holland,—and you have [527] asked me the question, and I will try to answer it——

Q. I hope you will, sir.

A. ——this way: that we had to devise a method, whether the ores were rich or lean in vanadium, that we would only produce the amount of vanadium that would be sold according to the economics of the situation, so that the uranium would be divorced from the vanadium business, and the security of the country would also be divorced from the quarreling between the vanadium companies, or the inter-quarrelings of vanadium policy.

That was the reason I was requested to go down to Washington by Senator Johnson and Senator Milligan, both of whom I know personally, as you do, because we both live in that State, and Senator Johnson asked me to go down and talk to Admiral Strauss, and one of their engineers called Hugh Kaiser, who is now head of the Academy of Science—Hugh Kaiser was the engineer assigned the job with Union Mines Development Company for the

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secret Manhattan job, and as it appeared we were going from the Army job into the newly-formed Atomic Energy program, it was essential that the Atomic Energy people would have the proper counsel from the experience of the Manhattan District, and background as to the limitations of this field in regard to the uranium process.

At that time, with my knowledge and experience of 22 [528] years with this company, the Carbide Company, I believed there was in existence an arrangement that limited the sales on the market of vanadium.

Now, irrespective of the business reasons behind it, or whether it was for some other dollar consideration than ferro-chrome, this matter had suddenly become bigger than either Carbide or Mr. Hearst or your Mr. Bransome, or anybody, and therefore I was beginning to despair at this time that we would be able to convey to the Atomic Energy Commission the urgency of understanding the situation, so that their newly-formed policies would not be channeled into a restrictive and a small production of uranium in tune with and in proportion to vanadium markets.

Thereupon started the real drama of this situation, and here is the real problem where the whole thing developed.

So the meeting with Mr. Hearst was—followed a meeting at which I had resigned on December 11th, but they had not accepted it.

On December 22nd I had a meeting in Washing-

ton, and I think I have a reference in a memorandum here that I can give you about that meeting. I didn't particularly name the Molybdenum Corporation of America, but would you like me to read it?

- Q. I don't know. Let me see it.
- A. Anyway, it is dated. [529]
- Q. If you can tell it, why don't you tell it?

The Court: How is that material to the issues in this case?

Mr. Holland: I do not think it is, your Honor, but he went into it on direct.

The Court: All right.

Mr. Holland: I do not believe we need to take the time. I think you described it well.

The Witness: Thank you.

- Q. (By The Court): One thing I would like to ask you, Mr. Witness: From 1944 to 1947 what was the general condition of the mining business in this Colorado Plateau?
- A. The vanadium mines were shut down. Thousands of men were thrown out of work. We had lots of vanadium we could not sell, and apparently there was the same restrictive policies of pricing and marketing that prevailed at that time, as far as my knowledge is concerned.
 - Q. Was there any demand for the material?
- A. We believed there was, if you would go out and make the price—reduce the price so that you could sell the vanadium in competition with other alloys.

- Q. Was that condition general over the nation?
- A. The general situation over the nation at the end of the war, we were just adapting our economy from war to peace [530] time, and really it was the start of the boom. Our automobile companies were just getting under way, and they were using a lot of metal. I think you could say there was plenty of market there if you went out and tried to get it. I think you can always sell something if you have something that is worthwhile selling and you have the proper price.
- Q. What I want to know is, in this territory down here, now, that you are speaking about—the Colorado Plateau—what was there in that period from 1944 to 1947 that indicated a desire to control the production of vanadium?
- A. What was there that indicated a desire to control the production? I would say that the price of vanadium had not been reduced—and yet that is not the answer you have asked me.
- Q. Well, you state now that these mills had an enormous supply on hand, and they had to shut them down. Was there a demand for the production?
 - A. As I stated, your Honor, there was a demand for the production if the price was reduced so it could compete with other alloys. That was my opinion on it.
 - Q. (By Mr. Holland): Now, actually, when did Uravan start up again?

- A. I believe about 1949, or 1948. We shut down from 1944 to 1949, about three or four years.
 - Q. Naturita ran during that period, didn't it?
- A. Naturita ran. Naturita had a market, I believe. They would not have run if they didn't.
- Q. And between the stockpile and the Korean War which came on there was a tremendous demand for vanadium, wasn't there?
- A. Up to 1946 there was a good demand for vanadium, but Union Carbide and the Metallurgical Company were not selling any of it.
 - Q. It was being sold, wasn't it?
 - A. I presume it was being sold, yes.
 - Q. It was being sold into stockpile?
- A. Well, the stockpile is a different consideration, Mr. Holland.
 - Q. That is for the national security, isn't it?
- A. Well, that is looking ahead in the future, but it is not a matter of current need.
 - Q. In case we have war?
 - A. Looking ahead for another war.
- Q. The Atomic Energy Commission had charge of the procurement of uranium in building up uranium supplies for the country, did they not?
- A. They started, I believe, in 1947, with their first procurement of uranium.
- Q. And they did a very good and pretty successful job of it, did they not? [532]
- A. Beginning about nineteen—at first there was a great deal of argument about that.
 - Q. But they did. Do you want to answer the

(Testimony of Blair Burwell.)
question? Did they, or did they not, do a good job
on it?

- A. I don't think they did a good job up until about 1950, and from then on they did a splendid job.
- Q. You know, do you not, that the Climax Uranium, and the Vanadium Corporation, and the Union Carbide, cooperated fully with the Atomic Energy Commission in order to make that program a success?
- A. No question. From 1950 on they all cooperated, and it is the greatest field in the world today, and it is a great achievement. Prior to that, no.
- Q. Do you have any letters in connection with this conversation—
- Mr. Alioto: May I have the last part of that answer read?

(Answer read by reporter.) [533]

- Q. You said 1950, didn't you, Mr. Burwell?
- A. That's correct.
- Q. Instead of nineteen-

Have you any letters or correspondence in connection with your conversation with Mr. Bransome in December of 1947?

- A. I have a letter—I have a letter which refers to that, which has written on January 22, 1948, which mentions that conversation.
 - Q. Written by whom?
- A. (After examining document) Written by me to Mr. H. D. Kaiser of the Atomic Energy Commission, Washington, D. C.

- Q. May I see it, please?
- A. (Handing document to Mr. Holland) The first part is personal matter. The last paragraph is pertinent to this.
 - Q. You would rather I not read it?
 - A. Well, you can-
 - Q. I won't if you don't want me to.
- A. Go ahead, go ahead; you might just as well. The previous page, the last paragraph, Mr. Holland.
 - Q. Pardon me?
 - A. The previous page, the last paragraph. (Discussion between counsel.)
- Mr. Alioto: I put a document in evidence for you. I would like you to put it in. You remember, I put in a couple for you. [534]

(Further discussion between counsel.)

Mr. Holland: I don't think—of course, I don't think this is material to the issues in the case, and I am not going to put it in as my own exhibit. If you want me to put it in as yours—

Mr. Alioto: If you put it in as my exhibit, I will be very happy to claim it as my exhibit. I would appreciate if you would read that portion of it to the jury, or let me do it.

Mr. Holland: I will glad to.

Mr. Archer: One minute. I would like to take a look at it (examining document).

I guess it wouldn't be offered against us, anyhow. It was after he left us. I take it it isn't offered against us.

Mr. Holland: This is a copy of a letter-

Q. (By Mr. Holland): Where would the original of this letter be?

A. I wouldn't know. It was written to Mr. Kaiser. Probably at the Atomic Energy Commission. He was the one that arranged—he was one of the men arranged for me to talk to.

Mr. Holland: Will you mark this as plaintiffs' exhibit.

What do you want to do about the personal part of it?

The Witness: Well,---

Mr. Holland: I won't read it to the jury. [535] The Witness: Just mark off the first paragraphs.

Mr. Alioto: I assume we can substitute a copy, taking anything out that is personal. We can make arrangements between ourselves, Mr. Holland.

The Clerk: Plaintiffs' Exhibit 58 admitted and filed in evidence.

(The letter referred to was thereupon marked Plaintiffs' Exhibit No. 58 in evidence.)

[See Book of Exhibits.]

Mr. Holland: This is a letter to Mr. H. D. Kaiser from Blair Burwell, dated January 22, 1948. It says (reading):

"In the main there does not seem to be much question as to the engineering approach to the problem of processing the carnotite,"—

Q. (By Mr. Holland): You were talking about carnotite ore here, is that correct? A. Yes.

Mr. Holland (continuing reading): --- "but most

of the questions revolve about the disposal of excess vanadium. In this connection I had an interesting talk with Ted Bransome as a result of a casual meeting which developed into a brief discussion of the western situation. I told Ted that I believed that vanadium could be produced at a byproduct price of 65 cents per pound of VaOs from a [536] properly engineered plant with the economies of such a plant, and at the same time would produce uranium for the government at a much lower price than is being considered now. While the price of 65 cents per pound of V2Os would be a Godsend to V.C.A. in view of their present 85-cent cost, the principal concern of T.B. was the possibility that this material would also be available for open market sale at the same price, which might enable competition to enter the ferro-vanadium field by way of Continental Ore or other competitors. The price which I have suggested on my chart at 65 cents is a price better than the more favored cost to either of the two companies when producing at their present sales rate. I think it is going to be difficult to compose the warring interests of the vanadium industry, and that it is going to take a diplomat of the first water to take care of the reasonable interests of the vanadium industry and set aside the ever-present monopoly question which is cited in the present monopoly suit."

Q. (By Mr. Holland): By that you are referring to the suit that was pending in Denver, Colorado?

A. Yes. [537]

Q. In which these defendants were acquitted, is that correct?A. That's correct.

Mr. Holland (continuing reading): "I have a feeling that John Gustafson will be equal to the job. One point of interest here is the apparent feeling among those of our corporation"—

Q. (By Mr. Holland): By that you mean Union Carbide?

A. That's right.

Mr. Holland (continuing reading): ——"that we should lean backwards if possible in assisting the Commission in its development of the District, rather than crowd the ills and needs of the vanadium industry into the picture at this time.

"King Haldane sends his best regards to you with the hope that he will see you out in this country soon."

Q. (By Mr. Holland): Well, as a result, the Atomic Energy Commission then took charge of the situation, is that correct?

A. Well, they had taken charge of the situation before that, and this was a conversation in the formative period of the Atomic Energy Commission policy.

Q. And they adopted policies encouraging the search for [538] and the development of uranium, is that correct?

A. No.

Q. No? I don't want to get into a collateral anatter too much.

A. Do you want another document? I can give you their policy report here.

Q. What is the date on that?

A. December 17, 1948.

Q. O. K.

A. This is a public advance for release. The statement of John K. Gustafson, the manager of the raw material operation, U. S. Atomic Energy Commission, at a press conference in Denver, Colorado, December 17, 1948.

That was at a Rotary Club meeting. I was present.

Q. Who was Mr. Gustafson?

A. He was manager of the raw material division of the Atomic Energy Commission at that time. Shortly afterward he left.

Mr. Lillienthal was also present at this meeting.

Mr. Archer: What was that last name?

Mr. Alioto: Lillienthal-David Lillienthal.

A. (Continuing) And then this paper, which is an amazing one in view of the record,—in view of the record that we had millions of tons of ore which the Manhattan District would procure—I won't trouble to read you all of it, but I will [539] read the pertinent place.

It says (reading):

"Following the war it was tentatively decided by the Manhattan District to purchase only byproducts of uranium, rather than stimulate and support increased production by special incentives. This position was based on the fact"—

he says, which is obviously untrue (continuing reading)—

rado Plateau were limited, expensive to mine and process, and the only advantage of an accelerated program would be to make this limited supply available sooner. Since the estimated annual production of the Colorado Plateau under the accelerated program would be small in relation to total U. S. requirements in supplies available from foreign sources, it appeared more economical to obtain the vanadium as a by-product from vanadium operations which are geared to the vanadium market."

Now, in view of the fact that already there were documents in the possession of the government, that there was ten years ore supply of uranium available in that area immediately, that this area had produced the essential part of the atomic bomb, this meant that we had lost the battle in so far as freeing ourselves from this program. [540]

Q. (By Mr. Holland): But that was not the ultimate result, was it?

A. No. The ultimate result is a brief I wrote for Mr. Millikan at the Blair House meetings, which is right over there. And if you would like to have that—we might as well introduce the whole thing.

Mr. Alioto: Do you want to put that in evidence?

Mr. Holland: No, it's too long.

The Witness: That has been declassified.

Mr. Alioto: Sure you don't want to?

The Witness: This was requested of me at the

Joint Session of the House Committee Atomic Affairs Meeting, at the critical Blair House meeting when the U. S. Government was asked to give its atomic secrets to Britain, at the time Fuchs was in the British Atomic Energy Commission, on the plea that there was no uranium in the United States.

Now, until that time I had stayed on the sidelines. I had resigned from the company. And we were much concerned. And Sunday night, at my home in Grand Junction, Mr. Millikan rang me up and told me that there was a meeting in whichthat the security of the country was involved-call it the atomic crisis-it was in the headlines-and I wrote that secret brief in which I revealed the whole relationship of the background of this district, the need for uranium production in the future, the result of which was that Mr. [541] Lillienthal eventually lost his position, the Atomic Energy: Commission was reogranized; and your company and the Carbide Company, and all of us, now look at a great amount of uranium. Compared to this we have more uranium than in any other part of the world exists. And when you look at the record today, at this time, that this district is the greatest supply in the world that we have; more than for security, we have everything for power. And you look back at this - they said there was little uranium in this field. You could see how dangerously we skinned along the edges of national survival when some of this lumble-stumble guess went in this matter of natural resources.

That, Mr. Holland, is my story.

- Q. It is true, is it not, that these two defendants contributed very considerably to the success of the uranium program?

 A. Afterwards.
 - Q. They have? A. Afterwards.
 - Q. Have they not?
- A. Afterwards. However, at this time, the reason that Mr. Van Fleet turned these papers over to the government was that he, as a corporate officer, was big enough, and thought enough of the Union Carbide Company to keep a few men in the Carbide who might have got the corporation into trouble by [542] going ahead with restricted policies in this field, because obviously, if they had followed this policy-and that was dictated, as I was quite sure, by the vanadium interests, advisers to the Atomic Energy Commission at that time—that if that had happened Carbide would have been blamed severely by the public, if it found out that we were in a national crisis and we had no uranium simply because somebody valued dollars more than they did their patriotism.
 - Q. But that isn't what happened?
 - A. That didn't happen. It didn't happen just because these things were written.
 - Q. Because of what you did?
 - A. I wasn't the martyr in this thing, nor was I the only one, Mr. Holland. There were a lot of engineers who lived in that field just the same as I did, and they all contributed. That's right.

- Q. And these companies contributed, did they not?
- Oh, unquestionably, your company, Mr. Hol-A. land, the Vanadium Corporation, has done a splendid job since that time. I think they did a splendid -the time before that. I have no criticism of the integrity of your people. I don't think you knew the background of what was going on. And I can say that the Carbide, itself, as a whole, is - the great corporation did a splendid job during the war, and the fact that a few people almost got ahold of policies which might have been [543] destructive at the moment doesn't necessarily damn the Carbide Company. Today they are one of the big factors in this field. They only have about 17 percent of the field, and they lost a corporate opportunity that is worth billions to them.
- Q. In other words, if they had taken this opportunity they would have controlled this field, is that correct?
- A. Well, they could have largely, and, of course, by that same token, if they had controlled the field, if they had done it fairly, if they had done it unselfishly, if they had done it with an eye to their public trust, it would have been good business. I don't think they ever would have been indicted for monopoly on it.
- Q. In other words, you believe in the paternal monopoly? A. What?
 - Q. You believe in a sort of paternal monopoly? Mr. Alioto: If your Honor please, whether he

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(Testimony of Blair Burwell.)

believes in paternal monopoly, I think is aside from any question here.

The Court: I don't know what he means by it.

Mr. Alioto: I don't, either.

Mr. Holland: I don't, either.

The Court: I don't think anybody else does. I am sure the jury doesn't.

- A. I believe the matters that are before this Court, the matters of vanadium markets in the past, are more or less [544] dirty dishes that pretty much have to be cleaned up as you go along. I think they are to be regretted. They did exist, and I apologize to the Court if I have taken too much of your time to tell you this story. I thank you very much for not interrupting.
- Q. (By the Court): Now, was there any reason why this vanadium that you had on hand from '44 to '48—it could have been sold at the price they wanted for it, couldn't it?
- A. It could have been sold at a price and made a profit if the Carbide Company would go after it.
- Q. No, that isn't my point. Was there a demand for that vanadium during that period?
 - A. Well, I believe so.
- Q. Well, now, if there was a demand for it and you had plenty of it why wasn't it sold why couldn't it be sold?

 A. Your Honor,—
 - Q. Was it on account of the price?
- A. Your Honor, the Electro Metallurgical Company was making no effort to sell it because the customer was the Vanadium Corporation of America.

- Q. Was anybody making any effort to buy it? That's the point.
- A. Well, I think they would make some effort to buy it, if somebody would come in and say, "Well, here, we would like [545] to sell you some vanadium. We will give you a good deal and make you a little less price; it's a little better stuff."
- Q. I know. Did anybody come around and say, "Here, I need some vanadium and I want to buy it"?
 - A. Well, I don't think it is handled that way. The Court: No, I don't think so, either. Go ahead.
- Q. (By Mr. Holland): Mr. Burwell, you say you were not engaged in any business transactions with Mr. Leir at all?
- A. That's correct, we had no financial relationship.
- Q. Have you had a financial relationship of any kind?
- A. Well, I believe, now, that Mr. Leir bought a note of Climax Molybdenum on the market. We possessed Climax Molybdenum uranium note.
 - Q. What do you mean? A. Six percent.
 - Q. What do you mean, bought on the market?
- A. Well, we had the note. We were trying to sell it to raise some money because our tungsten mines were shut down the other day, and he is a stockholder, and he offered to buy the note because he had some money. We discounted the note. I think it was two hundred and some thousand dollars. And

he bought the note. We were offering it to other people at the same time. It pays six percent interest. As far as I am [546] concerned it was purely a commercial transaction.

- Q. He bought the note from you recently at a discount, is that correct?
 - A. I think it was a year ago.

Mr. Holland: That is all.

Redirect Examination

- Q. (By Mr. Alioto): Mr. Burwell, I want to first take up the Court's question to you about whether or not anybody was trying to make an effort to buy vanadium from you at the time that there was excess vanadium around to be sold. I believe your answer was that nobody was trying to make an effort, is that it?
- A. Well, I don't believe anybody was making an effort to sell it. I think that there was a market existing for vanadium. People were trying to buy vanadium, yes.
- Q. How about Continental Ore Company and Mr. Leir, were they trying to buy vanadium during this time of excess, from you and from Vanadium Corporation of America?
- A. I understand so. I believe they were trying to buy ten or fifteen thousand pounds a month. I think that's here in some of these letters.
- Q. (By the Court): When was that? What date?

 A. In this period.

Mr. Alioto: I will establish it, if your Honor [547] please.

Q. (By the Court): What date?

Mr. Alioto: I have an exact date on that.

Q. (By Mr. Alioto): I show you a letter marked —I show you Plaintiffs' Exhibit 42 in this case. It is, first, a letter to your organization, Electro Metallurgical Company, November 17, 1943.

Your Honor will recall that this is a month after the document put in by Mr. Archer this morning saying that the supply was now easing, or that supply and demand had worked itself out.

November 17th of 1943 the Continental Ore Company wrote to your corporation and said (reading):

"We would appreciate your offering us 10,000 to 15,000 pounds of V₂O₅ contained in fused vanadic acid per month. We would be ready to sign a contract with you for a fixed length of time."—

Mr. Archer: I object to this — I object to the question.

Mr. Alioto: I haven't asked the question, yet.

Mr. Archer: I thought you had finished.

Mr. Alioto: I haven't asked it, yet.

Mr. Archer: When you finish, let me know.

Mr. Alioto: I don't do things like that around [548] here. I don't know what would happen to me.

The Court: Go ahead.

Q. (By Mr. Alioto): On November 30th, or 13 days later, that letter not having been answered, Continental Ore Company wrote again to your company and said (reading):

"Gentlemen:

"We have not as yet received a reply from you to our letter of November 17th of which we enclose a copy, since the original may have gone astray. We would very much appreciate hearing from you regarding this matter at your earliest convenience."

And your company replied—November 30, 1943—apparently it had crossed in the mail, unless it was delivered by hand—apparently crossed in the mail, and said (reading):

"Continental Ore Company,

"Mr. Henry J. Leir.

"Gentlemen:

"Referring to your inquiry for fused vanadium oxide, in view of the many uncertainties prevailing at the present time we do not feel we should undertake supplying your regular requirements for this material."

Now, my question to you is, at the time that this request was made of your company, and your company turned it [549] down, did you hear anything inside the organization as to why they wouldn't supply the Continental Ore Company, when they had—when the supply and demand situation on vanadium oxide was not tight? That's the question.

Mr. Archer: I object to the question on the ground the statement is without foundation. He said it was written to his company. It is clearly to the Electro Metallurgical Company. Mr. Burwell has testified he was never an officer or an employee of any company but the United States Vanadium Corporation. [550]

- Q. (By Mr. Alioto): Well, let me just establish some things on that, then. You testified to a number of meetings with Mr. Priestley, Mr. Haggerson, Mr. Sneath, and Mr. Rafferty.
 - A. That is right.
- Q. Were those people connected with the Electro Metallurgical Company? A. They were.
- Q. They were the chief managing agents, weren't they?

 A. They were.
- Q. And when you had the meeting of the board of directors that you testified to in 1946, when you and Mr. Priestley had the row about producing uranium, was Mr. Priestley at that time an officer of Electro Metallurgical Company?

 A. He was.

Mr. Archer: I object to the question. His testimony was it was not a meeting of the board of directors, but a meeting of some executives.

The Witness: They were also directors.

- Q. (By Mr. Archer): Was it a meeting of the board of directors?
- A. They were both directors and executives, Mr. Archer.
- Q. (By the Court): Was this a meeting of the board of directors, or was it just a director or officer talking individually? [551]
- A. The executive committee of executives; vicepresidents of the corporation were also directors of the corporation at the same time. They did not call the meeting as a directors' meeting; they called the meeting as a budget committee meeting, technically.
 - Q. (By Mr. Alioto): And then, in connection

with the Dry Valley matter, for example, you stated it was Mr. Haggerson who told you and Mr. Van Fleet to turn the properties over to the Vanadium Corporation of America, didn't you?

- A. That is correct.
- Q. So you had a good deal of contact, didn't you, with the people who sold the product that you produced for them?

 A. Twenty years of it.
 - Q. All right.

Now, in the light of this correspondence, and in the light of the questions asked you by the Court as to whether anybody was trying to buy this from you, do you know the reason why the Electro Metallurgical Company would not sell the vanadium oxide to Continental Ore Company when it asked for it—10,000 to 15,000 pounds?

Mr. Archer: I object to the question as without foundation. There is no indication who saw this letter at the time it was written.

Mr. Alioto: Your Honor asked him a number of [552] questions on this line, if your Honor please, and the record—

The Court: I understand exactly what the record is.

- Q. (By the Court): When did you first know about this, Mr. Witness? When did you first know about these letters?
- A. The letters here? Well, the letters themselves, I had not seen them until they were put before this meeting. I heard about the matter at this time, in

1943. They were not in my files, these letters, and I didn't see them before this time.

- Q. Was this arrangement with the government in force at that time? A. No, it was not.
 - Q. When did it become effective?
- A. The government program ended, I think, shortly before this, and we were shutting down our mines because we had surplus vanadium at the time this letter was written.
 - Q. In 1943?
- A. Late 1943, that is correct. We had vanadium and were shutting our mines down and laying off our people at the time this letter was written. I knew about the Leir incident as a matter of conversations, discussions that came to me naturally in the course of my duties. [553]
- Q. (By Mr. Alioto): Did you know at that time that Mr. Leir, or the Continental Ore Company, were trying to buy—was trying to buy vanadium oxide from your company?
 - A. Oh, yes. I heard that at that time.
- Q. Do you know why they would not sell it to them?
- A. Well, I heard exactly that they did not want to sell vanadium to Mr. Leir because they wanted to keep him out of the vanadium business. No other reason.
- Mr. Alioto: Now then, I would like to just read to the jury, in view of the testimony, a similar letter. This is, again, November of 1943. This is Exhibit 46.

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(Testimony of Blair Burwell.)

Mr. Leir wrote to the Vanadium Corporation of America at the same time. This is the other company (reading):

"Gentlemen:"-

this is dated November 16, 1943 (reading):

"Gentlemen:

"We would appreciate your offering us 10,000 to 15,000 pounds of V_2O_5 contained in vanadic acid per month. We would be ready to sign a contract with you for a fixed length of time."

And the answer, November 19, 1943, the same month (reading):

"The Continental Ore Company.

"Gentiemen: [554]

"Re: Vanadium pentoxide.

"In response to your inquiry of November 16th requesting quotation on 10,000 to 15,000 pounds monthly of V₂O₂ content in vanadic acid, we regret very much that due to our present commitments we are not in a position to take on this additional tonnage at the present time. Perhaps if you are still interested at a later date and our situation changes we will be glad to look into the matter further at that time.

"Regretting our inability to be of service to you at this time, we are

"Very truly yours,

"Gustav Loub,

"Assistant Vice President,

"Vanadium Corporation of America."

Q. (By Mr. Alioto): Now, Mr. Burwell, at this time your company was representing to the United States Government that because the vanadium supply was plentiful they should cut down the production of Nisley & Wilson, wasn't it?

Mr. Archer: I object to the question as leading, your Honor.

The Court: It is leading and suggestive. He is your witness, [555]

Q. (By Mr. Alioto): As of November, 1943, what, if any, reports was your company making to the United States Government about the vanadium situation with respect to whether it was in tight supply or in plentiful supply?

The Witness: I didn't catch that last. I am sorry.

(Question read by the reporter.)

- A. We were—my recollection is it was in plentiful supply. It couldn't have been anything else. It was running out of our ears. We had more than we needed. We couldn't sell it.
- Q. (By Mr. Alioto): And that is what you told the government, isn't it? A. Oh, yes.
- Q. In response to certain questions from Mr. Holland you read a certain statement of Mr. Gustafson as to the vanadium industry.

May I please have that statement you read from, Mr. Holland? The reason, principally, why I want it is because there was a good deal of talk at that time about this document here, this document there,

(Testimony of Blair Burwell.)
and I am sure the record is confused on that matter.

May we have this marked for identification?

(The statement referred to was thereupon marked Plaintiffs' Exhibit No. 59 for identification.)

Q. (By Mr. Alioto): Would you be good enough to look at Plaintiffs' 59 for identification and mark with a pencil and initial that section which you read into the record, so we will know where it is?

A. (Witness marks on exhibit.)

Mr. Alioto: We will offer that section into evidence, if your Honor please, so the record will be clear as to what he was talking about.

The Court: Isn't it already in evidence?

Mr. Alioto: The problem is he read it, and there were a lot of references to this record here, this record there, and I am just afraid the record is somewhat confused. It ought either to be in evidence somewhere, or identified, so it can be referred to, so we will know what we are speaking of.

The Court: Very well. Admitted.

(The portion of the statement marked Plaintiffs' Exhibit No. 59 for identification was marked Plaintiffs' Exhibit No. 59-A in evidence.)

Q. (By Mr. Alioto): Now then, with respect to the last sentence, which I want to read you (reading):

"Since the estimated annual production of the Colorado Plateau, even under an accelerated program, [557] would be small in relation to the total

U. S. requirements and to supplies available from foreign sources, it appeared more economical to obtain the uranium as a by-product from vanadium operations which were geared to the vanadium market."

Now, on your examination by Mr. Holland I believe you said that the advice on this matter came from the Electro Metallurgical Sales Company, is that correct?

A. Well, by inference, and by the wording, which was precisely the same as used by representatives of the Electro Metallurgical Company, they were the same words that he used in conferences we had on the matter.

Mr. Alioto: I will make a motion to strike the language "by inference," if your Honor please. This matter ought not to be by inference.

Mr. Holland: Strike the whole thing.

Mr. Alioto: I made a motion to strike the whole thing, didn't I? I am going to get at it directly. The whole thing is stricken, as I understand it.

Q. (By Mr. Alioto): Isn't this almost word-forword the language used by Mr. Priestley to you at this committee and directors' meeting?

A. That is correct.

Q. At the time you had your fight?

A. That is correct, that is correct. [558]

Mr. Archer: I object to the question as leading.

The Court: Objection sustained. That is purely calling for a conclusion. To say now that that is the language of a certain individual because you had

heard him use that kind of language before? That is calling for a conclusion.

Mr. Alioto: I am simply asking for the fact, first, if your Honor please, and then I want to develop it further. I want to show that that man was also the adviser to the Atomic Energy Commission at the time.

The Court: Well, we will take a recess, now, until tomorrow morning.

(Whereupon an adjournment was taken until Friday, June 6, 1958, at 10:00 o'clock a.m.)

June 6, 1958, 10:00 o'clock a.m.

The Clerk: Continental Ore versus Union Carbide et al., further trial.

BLAIR BURWELL

a witness called on behalf of the plaintiff, having been previously duly sworn, resumed the stand and testified further as follows:

Redirect Examination—(Continued)

Mr. Alioto: If your Honor please, after yester-day's session there was placed in evidence as Exhibit 59 for the plaintiff a document from this witness to Mr. H. D. Kaiser of the Atomic Energy Commission, and at that time the witness said there were one or two lines of personal matter in it.

The witness has now said that he has no objection to the entire letter going in. Counsel and I have discussed it this morning and Mr. Holland suggests it

be done in that fashion, and I have no objection to it, so, if it may be the order of the Court that the entire letter, previously marked Plaintiffs' Exhibit 58, shall be received in evidence.

The Court: Very well.

(Letter, 1/22/48, Burwell to Kaiser, received in evidence in its entirety as Exhibit No. 58.) [See Book of Exhibits.]

Q. (By Mr. Alioto): Now, Mr. Burwell, yesferday we were discussing [561] Plaintiffs' Exhibit 59-A at the adjournment, that being the statement of Mr. Gustafson of the Atomic Energy Commission, dated December 17, 1948, and more particularly that portion of the statement which you marked out and which reads as follows:

"Following the war it was tentatively decided by the Manhattan District to purchase only by-product uranium rather than to stimulate and support increased production by special incentives, and then it appeared more economical to obtain uranium as a by-product from the vanadium operations which were geared to the vanadium market."

Now, had you prior to this time discussed this same subject matter with Mr. Priestley of Electro Metallurgical Company?

- A. With Mr. Remmers of the Electro Metallurgical Company and Mr. Priestley, both.
- Q. And approximately how long prior to December 17 of 1948 did that discussion between you, Mr. Priestley and Mr. Remmers take place?
 - A. Approximately a year, a year and a half.

- Where did that discussion take place?
- A. One of the discussions took place at the meeting of the Budget Committee of the officers in the Carbide.
- Q. Now, on that meeting, you have already testified to [562] that and that's already in the record so there will be no occasion to repeat that, Mr. Burwell, unless there is something you wanted to add that you don't presently remember having testified to.

Now, where did you have this other meeting with A. I don't recall the place. him?

- Q. You think it was in New York?
- There were a number of meetings in which this thing was discussed.
- Q. Would you be good enough to give us the substance of your conversations, that is, conversations between you, Mr. Priestley and Mr. Remmers, on this subject?
- Well, in particular I recall a conversation— I believe it was in Grand Junction, Colorado, with Mr. Remmers,—pertaining to this point.

The Court: Who is Mr. Remmers?

Vice-President of Electro Metallurgical Com-Vice-President of Electro Metallurgical pany. Sales.

In which we discussed the future of the Colorado Plateau's operation and I was stating the objectives of acquisition and of plans for the future that had been developed as a matter of corporate policy

before he came into the picture a year or two before.

Well, I stated I thought that the production of vanadium would have to be subordinated to the production of uranium, that we had prepared at company expense a plan which [563] was the concensus of our opinion of what should be done, and I said that I thought that the uranium field would be opened up in a very short time and suggested we acquire certain mining properties, particularly the Polar Mesa, the Outlaw Mesa, the center of the mesas, various tracts of mining lands that were not at that time acquired.

He said he didn't feel that this program was going to come for another five years.

And I told him I thought he was terribly wrong. He said he didn't believe that there was any real economics in getting uranium unless it was a byproduct from vanadium production tooled to the

vanadium sales.

And that was in the third floor of the Electro Building in Grand Junction, Colorado.

The Courf: When?

A. To the best of my recollection-

The Court: When?

A. Approximately that conversation, your Honor, I believe was in the fall of 1947, approximately 11 years.

Q. (By Mr. Alioto): Then did you ever discuss that same subject matter with Mr. Priestley of the Electro Metallurgical Company other than in the

meeting of the Budget Committee that you have already testified to?

- A. No, I don't recall. I probably did. I don't recall.
- Q. Now, who in 1948, or which companies in 1948 were the [564] advisers to the Atomic Energy Commission, Mr. Burwell?

 A. 1948?
 - Q. Yes. I am trying to—
 - A. I don't recall.
- Q. —relate this to the statement of Mr. Gustafson dated December 17th, 1948.

Now, prior to the time of that statement-

- A. I believe one of the advisers was Mr. Searles, the President of Numont Mining Company; another adviser was Mr. Donald McLaughlin of Home Stake Mining Company. About eight or nine people.
- Q. I am asking directly, to pinpoint it, did any of the companies involved in this litigation—
- A. None of the advisers were directly on the Advisory Board of the Raw Materials Commission, no.
- Q. Well, when you say "directly" on it, do you have some reservation in mind?
- A. The Raw Material Division of the Atomic Energy Commission Advisory Board was appointed about that time and neither Mr. Priestley nor Mr. Remmers were on that Board.
 - Q. Now then, in relation-

The Court: The opinions—these statements that you have made, your idea as to the future develop-

ment with respect to uranium, and also the statement of Mr. Priestley and Mr. Van Fleet— [565]

Mr. Alioto: Remmers.

The Court: —Mr. Remmers—were those your individual opinions or was it something that had been worked out by the corporate bodies themselves?

A. These were the opinions that were worked out by the corporate body of United States Vanadium Corporation, the Union Carbide and Carbon Corporation, a year, year and a half preceding the time when Mr. Remmers and Mr. Priestley had any direct connection in the company.

To explain that, during the time that these policies were developed, your Honor, that I discussed in Grand Junction, Mr. Rafferty was chairman of the Board of United States Vanadium Corporation. He was also a vice-president, senior vice-president of the Carbide Company.

Mr. Van Fleet was the president of the United States Vanadium Corporation. Now, I was the vice-president.

The policies that had to do with the process and the policies that had to do with the planning of vanadium production in its relationship to uranium production for the future were corporate policies that were determined and agreed upon by the three people I have just named.

Now, subsequent to this particular time the following things unfortunately happened:

Mr. Van Fleet had an operation for cancer, was

ill; Mr. Rafferty had a heart attack, and later he died; Mr. [566] Priestley replaced Mr. Van Fleet as president of the company; and Mr. Remmers entered the company as a vice-president; and the entire corporate policy changed in the space of a year.

Therefore, when I was speaking in Grand Junction, or when I was speaking previously, I was speaking with the previous policy of the Carbide Company which had been considered by this group I just told you.

The Court: Well now, when you suggested that you should buy these additional claims that had possibility of uranium production, that was your idea, or was that the policy of the company as had been determined?

A. That was the recommendation that I made to the policy group that I belonged, and which we had agreed that if the atomic bomb succeeded and that the atomic program—the atomic energy was apparently on its way, that there was the corporate opportunity to acquire these additional properties and proceed to take advantage of our knowledge and know-how and research in this field.

The Court: Do you regard that as an exercise of good business judgment?

A. Why, surely so, your Honor. Surely so. As long as the exercise of good business judgment did not impair the national security.

Now, there is a fine point.

The Court: Getting to the other point, at the [567] time you made this recommendation, was it made as an exercise of business judgment of your companies in the development of uranium and vanadium production, or was it made to prevent somebody else from buying it?

A. No, in this time, your Honor, we had forgotten all about this business of preventing anybody else from buying. All of the questions of preventing somebody else from buying, insofar as Mr. Rafferty, Mr. Van Fleet and myself went, and insofar as the Carbide Corporation went at that time was all supposed to be forgotten.

In other words, we looked at this thing now as good business for the future because Carbide at that time was planning, and I have here in this case the discussions of the nuclear division of Union Carbide and Carbon Corporation where that great Corporation could take the leadership in this aton ic field, but there when you had the question of public trust, a good public servant and a great corporation, why, it was a great corporate opportunity, and I was ambitious, as any half-young mining engineer would be at that time, so it was good business, your Honor, from another standpoint entirely disassociated from what happened prior to that time.

But on the other hand, the core was this, that other people, who had no part or no sympathy or particularly no understanding—or, just say that they maybe didn't know—had moved into the corporation policy-forming committee after [568] 1944.

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There the great conflict, the warring conflict of the vanadium industry came up.

There is the story behind this atomic energy program.

The Court: Well, at this time-

A. It's hard to define-

The Court: ——were there a great many, what you might call, promoters, or those that were previously inexperienced in mining vanadium or uranium, were there a great many of those speaking and actually securing claims on this territory?

A. Yes, your Honor. We had used the term "promoters" which was a code word for people who were acquiring properties for espionage purposes.

The Court: Yes?

A. We termed—there's another term, "Promoters," which we didn't regard—you can't regard as promoters because as this field opened up and roads were built and as a result of the war effort and the Manhattan District needs, this field became a terrifically important field and it expanded greatly.

Now, there are hundreds and hundreds of little miners who had a few claims and a little cedar log shack up on some ridge that became—suddenly had an opportunity to do something, and, therefore, hundreds and thousands of mining claims were acquired in the adjacent—by these small [569] miners.

Now, those were the people, your Honor, that were mobilized as a part of the obtaining of additional vanadium and then for uranium by the

United States Vanadium Corporation, Union Carbide Company, by Mr. Van Fleet and myself — as what we thought our job was for the war.

Now, when we did that, we forgot all about this question: We'll keep them out of the vanadium business—and don't let them have the plant.

So you have to understand that there were three distinct shifts of corporate policy, and I am speaking for one going out and another one coming in, which we disagreed——

The Court: Yes.

A. Now, if this was just honest disagreement about money and honest disagreement about economics, whether it was good business, and the new people came in, the new president said: Mr. Van Fleet, you're chairman of the board; get out—and it was the good of the company for dollars—why, we couldn't have had anything to say about that at all, and I wouldn't be here.

But when we felt that that change of policy imperiled the objectives that Carbide had unselfishly composed, then there was a point that would sound a little bit far-fetched and idealistic unless you had lived this thing such as I have. Then the warring interests of the vanadium industry took over, [570] but the—

The Court: Anyway, these discussions now, the recommendations that you made, you were doing that from the standpoint of the development of your own corporation and the exercise of good business judgment?

A. At this time the corporate opportunity had shifted—

The Court: The time of the -

A. It had gotten too big to try to fool around with controlling by a small mill here and there. "Let's all get together and let's everybody do the best, because it's big enough for everybody now,"

Q. (By Mr. Alioto): Now, then, you indicated there was a change in that policy in 1944?

A. I did.

Q. And you said that certain other men gained control of the corporation, in answer to his Honor's question. Which men did you refer to?

A. Mr. W. J. Priestley, who had previously been president, I believe, of Electro Metallurgical Company, became president of the United States Vanadium Corporation.

Q. Yes. Anybody else come in at that time?

A. Now, this is after '44?

Q. Yes, I understand that, but you say the policy started to shift in '44.

A. Yes. Mr. Remmers, who isn't on that chart, was [571] vice-president of Electro Metallurgical Sales Corporation, became vice-president of United States Vanadium Corporation, along with me—there were two vice-presidents—in fact, there were three. [571-A]

Q. (By Mr. Alioto): Yes. Did Mr. Haggerson assume any different position at that time?

A. He, I believe, became president of the Union

Carbide & Carbon Corporation. I am not sure about that.

- Q. Did these three men change the policy of the corporation, as his Honor has inquired?
 - A. I just testified to that to the judge.
 - Q. What was the policy after 1944?

Mr. Archer: I object, your Honor. I think we should have some conversations here.

Mr. Holland: He has already stated that.

Mr. Alioto: No, he has not. He has stated the policy up to 1944. Now these new men took over.

The Court: Answer the question.

- A. Well, the policy after 1944 was to return to the same restrictive agreements on vanadium.
 - Q. (By Mr. Alioto): With whom?
 - A. With the Vanadium Corporation of America.

Mr. Archer: I move to strike that, your Honor. That is purely a conclusion of the witness.

The Witness: That was the quarrel we had.

- Q. (By the Court): That was the discussion?
- A. That was the quarrel between these officials of Carbide.

The Court: The objection will be sustained. I think before you can bind a corporation there must be some corporate act. The mere statement of an individual would not be conclusive evidence as to what the corporation did. Objection sustained and exception allowed.

Q. (By Mr. Alioto): In connection with this subject matter, were the discussions with Mr.

Priestley, with Mr. Remmers and Mr. Haggerson, about the policy of the corporation after 1944?

- A. That was the return, that we were going to make, the policy that was to obtain, to hold the vanadium business between the two companies, the Vanadium Corporation of America and the United States Vanadium Corporation.
- Q. And who said that? In substance, who said that?
- A. Well, Mr. Priestley, for one, as I recounted in this discussion with Mr. Rafferty in his office.

Mr. Archer: I move to strike the witness' answers, then, because he has stated he has already given his answer. The rest is just a conclusion.

The Court: Sustained. I think this is repetitious. Mr. Alioto: Let me wind up this subject in this way: [573]

Q. (By Mr. Alioto): What objection, if any, did you and Mr. Van Fleet make to Mr. Priestley, Mr. Remmers, Mr. Haggerson, or anybody else, about this restrictive policy?

Mr. Holland: I think that has already been testified to, your Honor.

The Court: Yes, I think he has covered that.

- Mr. Alioto: I thought so. If your Honor please, I thought so, except I thought your Honor's question had left the matter—
- Q. (By the Court): This was merely a discussion between you men, is that it?
- A. As officers of different groups of the company.

Q. Just a discussion?

A. Always policies are discussions, your Honor. I mean, they are not agreements. You are not sitting down and writing them down as a matter of corporate directors' meetings.

Q. (By Mr. Alioto): What, to your knowledge, did the company do thereafter, after 1944? What

did it do? What were the facts?

A. Again, the corporation proceeded to divert its sales of vanadium to the Vanadium Corporation of America. That is what I testified to in regard to the ferro-chrome silicon. That is what I testified, that we couldn't move our vanadium [574] at times when we had plenty of vanadium. This was going on all the time. This had started again. When the government purchasing had stopped and we were laying off our people, although we had a policy change, the sales department would not sell the vanadium.

Mr. Holland: If the Court please, I ask that this be stricken, because the witness has just testified that it is a matter to which he has already testified.

The Court: I think it is repetitious.

Mr. Alioto: If it is repetitious it should not hurt, if your Honor please.

Mr. Holland: We could go on forever.

The Court: It is not material; it is not competent. The objection is sustained.

Q. (By Mr. Alioto): Now, you were asked a great number of questions by both Mr. Holland and Mr. Archer about the government programs and

your participation in the government programs, and in answer to a question of Mr. Holland's you stated that you had prepared a report for Senator Milligan. I hand you a copy of a document marked "American Uranium Resources, by Blair Burwell, in July of 1949," and ask you if that is a copy of the report that you prepared for Senator Milligan?

A. That is.

Mr. Alioto: At the completion of counsel's [575] cross-examination we will offer this report in evidence.

Mr. Holland: Is that a speech Mr. Burwell made?

Mr. Alioto: No, this is not a speech; it is a report he prepared for Senator Milligan, with specific references not only to uranium, but to the vanadium industry.

Mr. Holland: What is the date of the report?

Mr. Alioto: July, 1949, which covers the approximate years about which Mr. Holland was interrogating the witness, and on the same subject matter, but also refers to the policy of the Union Carbide Company in the 1947-1948 period.

Mr. Holland: Does it add anything to what he has already said on the stand, or is it just a repetition of it?

Mr. Alioto: I think it adds a good deal.

Mr. Holland: I have not read the report, but I object to it as being repetitious. It is just the same stuff we have been listening to for the last week.

The Court: The objection is sustained. Exception allowed.

Let us get along. I think this witness has covered every feature that possibly could be covered.

Mr. Alioto: In connection with that matter would your Honor be good enough to read certain sections of the report?

The Court: This is a report to Senator Milli-

gan?

Mr. Alioto: Yes, by an official of Carbide, [576] relating to Carbide policy, although he was not an official at this time. He relates the Carbide policy at the time that he was an official.

Mr. Holland: He has already related that, your

Honor.

The Court: Objection sustained.

Mr. Alioto: May we have this document, then, marked for identification, if your Honor please, so the record will be clear at this point what is being excluded?

(The report referred to was thereupon marked Plaintiffs' Exhibit No. 60 for identification.)

Mr. Alioto: I take it the record sufficiently shows the document we have been discussing, and which was excluded, is Plaintiffs' 60 for identification.

The Court: Very well.

Q. (By Mr. Alioto): Mr. Burwell, there was considerable discussion with counsel and with the Court yesterday as to the interplay of various governmental regulations during the war, and I want

to be sure that those dates are clear. Let us start in 1938. You gave testimony about matters occurring in 1938. It is perfectly clear that there were no government or war regulations involved in 1938 at all, isn't it?

A. That is right.

- Q. Now we will take 1939. [577]
- A. None.
- Q. It is perfectly clear that there were none involved during that period of time.

We will take 1940. It is a fact, isn't it, that in 1940 there was an embargo on exports, in July of 1940?

Mr. Archer: I will stipulate to that.

Mr. Alioto: July of 1940, just an embargo on exports.

Mr. Holland: Why don't you take the stand, Mr. Alioto.

The Court: The embargo was made by the government?

Mr. Alioto: Yes.

- Q. (By Mr. Alioto): Except for the embargo on exports—
- A. There were some exceptions to the embargo at that time. Exports were allowed, I believe, subject to the government's approval.
- Q. They were certainly allowed to England, for example? A. That is right.
- Q. And England was a very big market in 1940 for vanadium, was it not?

Mr. Archer: I object to that question as lead-

ing. There is no basis for the statement that this man ever sold any vanadium in England. [578]

Q. (By Mr. Alioto): What is the situation with respect to England as an export market in 1940?

A. We were shipping vanadium to England in 1940.

Q. Except for this embargo in July of 1940 was there any other government regulation that affected the yanadium industry?

A. There was not.

Q. Now then, there was an allocation order on December 20, 1941, was there not?

Mr. Holland: Won't Mr. Alioto let the witness testify? He has been doing all the testifying himself.

Mr. Alioto: These are matters of record.

The Court: Let us get along.

A. Yes, that is my best recollection.

Q. (By Mr. Alioto): From 1941 up to 12/20/41 there was no further regulation, is that correct?

A. That is right.

Q. Then you had an allocation go into effect-

A. That is right.

Q. —on December 20, 1941?

A. That is right.

Mr. Alioto: Will counsel stipulate that that allocation was removed on December 30, 1943—the allocation [579] system?

Mr. Holland: We are just trying to make a chart here without using the witness.

Isn't it a fact that in August, 1941, there was a priority order?

Mr. Alioto: There was a priority order?

Mr. Holland: Yes, everything was put on priority. I mean, vanadium was put on priority in August, 1941.

Mr. Alioto: All right, let us put "August, 1941," there. The order itself was dated December 20, 1941.

Mr. Holland: No, that is another one.

Mr. Alioto: Can we agree, Mr. Holland and Mr. Archer, that the allocation system was removed on December 30, 1943?

Mr. Archer: Certainly not all allocations, because they were not all removed then.

Mr. Alioto: Well, the basic order on allocations.

Mr. Holland: Why don't you just put it in evidence?

Mr. Alioto: Do you have it?

Mr. Archer: No, I don't have it.

Mr. Alioto: If we can get it we will put it in evidence, but so we can understand some of the questions that will follow, will you agree that the allocations were removed on December 30, 1943?

Mr. Archer: There was another one at that date.

Mr. Alioto: December 30, 1943.

Q. (By Mr. Alioto): Now, you have already testified——

Mr. Archer: I think we ought to put in the price controls.

Mr. Alioto: Yes, we will get to the price controls. We will get them all in.

Q. (By Mr. Alioto): So far as Metals Reserve

program was concerned, you have already testified the decision was made in October and November, 1943, to cancel out certain of the Nisley contracts.

A. That is correct.

Q. So far as price control is concerned, price ceilings, the maximum price that should be charged went into effect, did it not, on April 28, 1942?

It is not very artistic writing, but we can agree they went into effect at that time.

Mr. Holland: There was a prior situation in 1941 under which there were voluntary price controls,—

Mr. Alioto: So far as the law is concerned-

Mr. Holland: ——by agreement with the government. You are getting into a pretty complicated subject here. Those dates are not quite as fixed as they appear to be.

Mr. Alioto: Can we agree that the maximum price [581] control order was effective April 28, 1942?

Mr. Holland: Yes. Why don't you get all these orders and put them into evidence?

Mr. Alioto: I have no objection to that. I have no objection to that at all.

Mr. Holland: I haven't got any of them. I am not sure you are absolutely accurate on that.

Mr. Alioto: Let us see the evidence we had yesterday, so it will be plain on its face.

Where are the requests for orders that I read last night that were turned down?

Mr. Holland: When you speak of price controls

(Testimony of Blair Burwell.)
you mean on both ferro-chrome and oxide, is that
correct?

Mr. Alioto: Yes, the maximum ceiling prices, so-called. We will get to that in a moment.

The Court: Do you think the witness will testify to that?

Mr. Alioto: Here is the point I was making:

- Q. (By Mr. Alioto): Do you recall yesterday I read certain requests of the plaintiff to the defendant, Electro Metallurgical Company, and the request of the vanadium corporation, dated November, 1943, when the plaintiff asked for 10,000 to 15,000 pounds of vanadium oxide per month? State whether or not there was any government regulation which forbade those companies from [582] complying with that request if they wanted to.
 - A. Not that I knew of.
- Q. During the period of time when you were operating under Metals Reserve—I think there was considerable testimony on that—during that period of time you operated one plant for Metals Reserve. That was the Durango plant. That is correct, is it not?

 A. That is correct.
- Q. But you also operated your own plant at Uravan for the regular customers that you had prior to that time, didn't you? A. Uravan and Rifle.
- Q. At Uravan and Rifle. And those plants were not being operated for Metals Reserve, were they?
 - A. Oh, no.
- Q. By reference to Plaintiffs' Exhibit No. 18 can you tell us what production, what private pro-

duction you had during the period from 1941 to 1945? A. Where?

Q. Private production. That would be Uravan and Rifle. 1941 to 1945.

A. In so far as Rifle went—I can put them both together so it won't take too much time.

In 1941 private production at Rifle and Uravan was 2,376,000 pounds.

1942, 3,510,000. [583]

1943 was 3,301,900 and some pounds.

1944 the Uravan plant closed, but there was still 2,554,000, coming largely from Rifle.

In 1945 there was 1,813,000 coming from Rifle, and none from Uravan.

Q. As against that, what was the production for Metals Reserve at Durango?

A. The production for Metals Reserve in Durango in 1941 was none, in 1941.

186,000 pounds—I just give the even thousands—in 1942.

852,000 in 1943.

300,000 in 1944.

365,000 in 1945.

Q. It is clear, then, that your private production was far greater than your Metals Reserve production was?

A. That is right.

Q. It is also true, is it not, that the Vanadium Corporation of America produced at Naturita, as well as the Monticello plant?

A. I think that is on the same sheet, isn't it?

Q. Yes.

I would like to read this to the jury, if your Honor please, at this point.

Vanadium Corporation of America, Metals Reserve, at [584] Monticello—and I will read the Naturita plant—I will read them together.

For 1941, 400,000 at Naturita; none for Metals Reserve at Monticello.

For 1942 the private production was 439,500; and their Metals Reserve production was 235,000.

1943 the private production was 752,000 pounds; the Metals Reserve production was 817,000.

1944 the private production at Naturita of the Vanadium Corporation of America was 786,000; the Metals Reserve production was 150,000.

In 1945 the Naturita production was 505,000; the Metals Reserve was 730,000 pounds of vanadium.

Mr. Archer: I think you ought to read the public production there under the government contracts which existed from 1943 to 1945.

Mr. Alioto: I will be very happy to, Mr. Archer. You are talking about, now,——

Mr. Archer: Ask Mr. Burwell. He prepared the chart.

Mr. Alioto: I can read it as well as Mr. Burwell.

The Witness: I beg to differ. I did not prepare
the chart.

Mr. Archer: Who prepared it, Mr. Burwell?

The Witness: Union Carbide & Carbon, U. S. [585] Vanadium people, the engineers under my direction. These were statistics from the companies' records, and I didn't prepare them personally.

Mr. Alioto: What is, specifically, the column you want me to read to the jury, Mr. Archer? I will be glad to do it.

Mr. Archer: The 2,000,000 pounds column. I believe Mr. Burwell testified yesterday they produced 1,900,000 pounds under the sludge plant contract with the Army, and I think if you look in Column 7, that is where they are continuing up to the year 1945.

Mr. Alioto: In Column 7 the production that Mr. Archer would like me to call your attention to, and which I am happy to do, is entitled "Plant A, Grand Junction, U.S.V. Contract Account, Pounds V₂O₅." This is the so-called sludge contract he refers to.

As against Uravan and others in 1940 there is nothing.

In 1941 there is nothing.

In 1942 there is nothing.

In 1943 there is 185,620 pounds.

In 1944 there is 820,606 pounds.

In 1945 there is 916,095 pounds.

Q. (By Mr. Alioto): Yesterday, at the end of the session, Mr. Holland asked you, Mr. Burwell, whether or not you were now a [586] competitor of V.C.A. or United States Vanadium Corporation.

A. I was so honored.

Q. You recall that line of inquiry, in any event.

Now then, approximately during what period of time did you go into the vanadium industry after you left Union Carbide?

A. 1952.

Q. 1952? A. I think that is the date.

Q. (By The Court): When did you leave the

defendant companies?

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A. In 1948, finally. '47 was my resignation. I finally left in the spring of '48. '52 is when I first entered into the vanadium production for—

Q. (By Mr. Alioto): Now, this document that you prepared for Senator Millikin, which is now marked Plaintiffs' Exhibit 60 for identification, was prepared, was it not, long before you went into the vanadium industry in any form on your own?

A. That's right.

Mr. Archer: I object to the question as leading. The Court: Yes, it is very leading and suggestive. You can ask him the question. Let him testify.

Mr. Alioto: I thought it was just a matter of time, if your Honor please. [587]

The Court: Well,-

- Q. (By Mr. Alioto): What was the time that you prepared the document for Senator Millikin?
 - A. July 8, 1948.
 - Q. July of 1948?
 - A. That's right. 1949.
- Q. '49. When was the time that you went into this competitive vanadium industry that Mr. Holland honors you with?
 - A. Approximately '52.
- Q. All right. So that at the time you wrote that report for Senator Millikin you weren't in any vanadium industry, were you?

 A. No.

Mr. Alioio: If your Honor please, we will offer it in evidence, now, on a different theory—as a prior

consistent statement. There has been an attempt here to indicate that his testimony is colored by the fact that he is a so-called competitor. Now, this—

The Court: You are, or were not connected with the company at the time that was prepared?

The Witness: In no way or form, your Honor.

The Court: Objection sustained.

Mr. Alioto: Well, I am offering it only as a prior consistent statement in view of the alleged impeachment—— [588]

The Court: Objection sustained. Exception allowed.

Mr. Alioto: So the record may be clear, the document I was offering in that connection was Plaintiffs' Exhibit 60 for identification.

Q. (By Mr. Alioto): Now, you were further asked yesterday whether or not you had certain business connections with Mr. Leir. State whether or not in July of 1949 you even knew Mr. Leir.

A. I had never met Mr. Leir until a year and a half ago.

Mr. Alioto: Now, if your Honor please, with respect to the attempted impeachment by showing some relationship between the witness and Mr. Leir, I now offer Plaintiffs' Exhibit 60 for identification on the ground it is a prior consistent statement in line with his testimony here before any even acquaintance with the plaintiffs' president arose.

The Court: Is that the same one you offered?

Mr. Alioto: It is the same document, on that different theory, to show a prior consistent—

The Court: Objection is sustained. Exception allowed.

Mr. Alioto: Now then, in order to complete the record on this matter of impeachment by showing interest, we would like to have marked for identification a document entitled "Memorandum on Vanadium and the Operation of the [589] United States Vanadium Corporation."

The Clerk: Plaintiffs' 61 marked for identification.

(The memorandum referred to was marked Plaintiffs' Exhibit No. 61 for identification.)

- Q. (By Mr. Alioto): Mr. Burwell, I show you a copy of a document that has now been marked for identification 61. Would you be good enough to look at that document, Mr. Burwell, and then state whether you are the author of it?
 - A. That's correct.
- Q. Can you tell us when it was that you composed that document?

January 4, 1956.

- Q. And does that document purport to set forth facts in the vanadium industry as you know them through your associations with these defendants?
 - A. They do, as I knew them.

Mr. Holland: Your Honor, this witness may have written a book on the subject. I think we ought to shut this off somewhere. I object to it on the grounds—

Mr. Alioto: I haven't offered anything, yet, if your Honor please.

. Mr. Holland: Oh, pardon me.

Mr. Alioto: I haven't completed the foundation [590] for this document. I am trying to make a record. I anticipate it may be excluded, and for that reason I want to be sure this record is here. We have a little tyrant here we have to operate with, as you know (indicating court reporter).

Q. (By Mr. Alioto): Now then, at the time you prepared this document, January 1st of 1956, did you even know Mr. Leir?

A. No, never met him.

Mr. Alioto: We will offer this document in evidence, if your Honor please, for the specific purpose of overcoming any inference of interest which Mr. Holland may have elicited by reason of bringing out the fact that he even knew the plaintiff, Mr. Leir.

The Court: Objection sustained.

Mr. Alioto: Thank you.

I think that makes the record on that, and we will move along, if your Honor please.

Q. (By Mr. Alioto): Now, in connection with the evidence on activities during the war, Mr. Burwell, particularly with respect to your testimony given on examination by Mr. Holland, Mr. Archer, and certain questions of the Court as to activities—as to certain government involvements during the war, we, at this time, as a matter of chronological presentation, if your Honor please, and while this

witness is here, offer into evidence as [591] against the Vanadium Corporation of America a letter dated March 11, 1940, from the Apex Smelting Company to the Vanadium Corporation of America requesting a supply of vanadium oxide, and the answer of the Vanadium Corporation of America dated April 8, 1940.

Mr. Holland: This witness had nothing to do with this, your Honor. We are going to have the Apex people here.

Mr. Alioto: Yes, but this witness has a lot to

Mr. Holland: He is offering it out of order, and-

Mr. Alioto: May I-

Mr. Holland: —and Mr. Leir would be the proper witness to introduce it.

Mr. Alioto: May I state the purpose for offering this?

The Court: What does this witness know about that?

Mr. Alioto: This, if your Honor please, covers a certain period of time when this witness says certain policies were in effect. I want to offer this—

Mr. Holland: This has nothing to do with the Carbide—

Mr. Alioto: I want to offer this, if your Honor please, and ask the witness whether or not any war regulations, or anything else, about which both counsel inquired extensively, [592] affected the dis-

position of this mill. I think I know the answer, but at the same time I think I am entitled to show it through this witness, as they had introduced the subject matter. It will be very short. I can do it in exactly five minutes if I am permitted.

Mr. Holland: I don't think it is proper. We object.

Mr. Alioto: I would like to make-

The Court: The objection will be sustained. You will have an opportunity to offer them.

Q. (By Mr. Alioto): Mr. Burwell, you plan to leave for your home——

Q. (By the Court): You had nothing to do with this?

A. The Apex matter?

Mr. Alioto: No, the witness didn't have anything to do with it, if your Honor please, but there has been an attempt here—

Mr. Holland: He is trying to anticipate our attempt.

The Court: The objection will be sustained.

Mr. Alioto: I want to make a statement as to the reason for it. If the Court does not want to hear it, we will go on to another matter. [593]

Q. (By Mr. Alioto): Now, Mr. Burwell, you gave certain testimony here, both in response to the questions of counsel and the Court, with respect to government controls of various types in the period during the year 1942.

In connection with that testimony, if your Honor please, we at this time offer an inter-office corre-

spondence of the Vanadium Corporation of America, being a letter from Gustav Laub to Mr. Edward S. Christiansen, its vice-president.

Another letter of Gustav Laub to E. D. Bransome, its president.

Another inter-office memorandum, dated during this '42 period, from Mr. Gustav Laub to Edward S. Christiansen.

And finally, an inter-office memorandum from Mr. Sterling to Mr. Kett.

All of these are very short, and I anticipate can be put in in about a minute and a half, and we would like to put them in at this point in connection specifically with the cross-examination of Mr. Archer as to certain war involvements during this period in '42.

Mr. Holland: This same consideration-

Q. (By the Court): Did you have anything to do with these letters?

Mr. Alioto: I will say to the Court that the witness did not, if your Honor please, but it is in connection [594] with the testimony as to what was going on in '42, and I think the jury should hear this chronologically, and they are very short, Judge.

Mr. Holland: He is anticipating matters. It is the same type of documents, exactly. It has nothing to do with the Apex Smelting and the Vanadium Corporation, about which this witness had nothing to do.

The Court: I think there is a proper way for

(Testimony of Blair Burwell.) you to introduce that. I doubt if it is proper at this time.

Objection will be sustained. Exception allowed. Mr. Alioto: All right.

So the record will be clear as to the documents we have been speaking of, if your Honor please, may we have these documents marked for identification?

(The four documents referred to were marked Plaintiffs' Exhibit No. 62 for identification.)

Mr. Alioto: I might say in that connection-Let me ask the witness a question.

Q. (By Mr. Alioto): I take it you propose, after your testimony is concluded here, to return to Grand Junction, Mr. Burwell?

A. It is very necessary that I do so, to take care of my own-

Q. (By Mr. Holland): I take it you could come back if it was necessary, [595] couldn't you, Mr. Burwell?

A. Well, that is possible. I am called to Washington, Mr. Holland, to testify as to an important bill the Senate Committee of Mines and Mining, and it is very important that I be there.

The Court: This is a matter—he had nothing to do with this. How are you identifying those letters?

Mr. Alioto: For this reason, if your Honor please: These letters, as far as authenticity and genuineness are concerned, they are already stipu-

lated to as the result of pre-trial proceedings, so there is no problem of identification. The reason I want to get them in at this time, if your Honor please, is because certain industry and governmental conditions existed at this time, of which this witness has given a great deal of testimony. Now then, if we bring them in at a time when this witness is not on the stand, and then the defense counsel attempt to insinuate that they were-that there were governmental policy or other industry reasons for the things that are evidenced by these documents, I am not going to have the witness available to bring those facts out. Whereas, if I can put them in now, and they involve a period of time about which counsel and the Court inquired---

The Court: Hasn't this witness testified to that very thing?

Mr. Alioto: Yes. But, if your Honor please, I [596] anticipate this kind of a practical courtroom situation—

The Court: Objection sustained. Let's get along with something else.

Mr. Alioto: All right.

Now, just to further identify the record on this matter—

The Court: If this witness is not—if he is leaving, I don't know how you can continue with your lawsuit. I think he is the only one, so far.

Mr. Alioto: Yes, we expect to conclude with him today, if your Honor please. It is very un-

usual that we get a former vice-president and director of a company to testify in this type of case.

May we have that marked for identification?

The Clerk: Plaintiffs' Exhibit 63 marked for identification.

(The letter referred to was thereupon marked Plaintiffs' Exhibit No. 63 for identification.)

Mr. Alioto: Plaintiffs' 63, if your Honor please, are the documents offered just before Plaintiffs' 62, which the Court ruled we could not offer at this time.

- Q. (By Mr. Alioto): Now, Mr. Burwell, Mr. Archer inquired of you with respect to certain production of the Anaconda Copper Company yesterday, and I think you told him that you did have a [597] conference with certain officials of the Anaconda Copper Company.
 - A. That's correct.
- Q. If you can, could you fix the approximate time when this conversation took place?
- A. Approximately six months prior to the shipments, and there is a record of the documents there, and I wouldn't try to give that date offhand.
- Q. All right. Now, the purchase document previously admitted into evidence indicates that there was a shipment from Anaconda in 1941—May of 1941. Do you think it may have been about six months prior to that time?
 - A. Yes, it was, about-maybe it was a year

(Testimony of Blair Burwell.)
prior to that time, because it preceded that ship-

prior to that time, because it preceded that shipment.

- Q. (By the Court): That involved your purchase of vanadium from the Anaconda people?
 - A. That's right.
- Q. Do you know of any reason why you couldn't buy it?
 - A. We were trying to buy it, your Honor.
- Q. Did you regard it as a good business proposition for your company to buy that?
 - A. We had a good business reason to buy it, yes.
- Q. (By Mr. Alioto): What was the business reason? [598]
 - A. To keep it out of the hands of competitors.
- Q. Now then—and that was pursuant to the policy of your company? A. Absolutely.
 - Q. And you were acting under instructions?
 - A. Absolutely.
- Q. Now then, in your testimony, the questions of Mr. Archer—from the questions of Mr. Archer—
 The Court: Just a minute. Right there.
- Q. (By the Court): Now, at that time the Anaconda group could have sold it to somebody else if they wanted to, couldn't they?

Mr. Alioto: I have a document that might develop that fact, if your Honor please.

The Court: Let him answer.

- A. They might have sold it to the Vanadium Corporation of America.
- Q. (By the Court): Well, could they have sold it to anybody else?

A. Nobody else was making ferro-vanadium; nobody else was buying.

Q. Was there any market for it then, other than yourself and the Vanadium Corporation of America?

A. Very little, your Honor. There was only the two.

The other thing would be that if they couldn't sell [599] the vanadium oxide to the two people who had the market—I mean the final product—there was an intermediate product—you have to understand, it wasn't a commercial—something you could go out and sell on the street corner. Therefore—

Q. Well, do you know of anybody else that could have bought it, as a business proposition, except the two companies you mentioned?

A. Not at that time, no.

Mr. Holland: Could I ask one question?

Mr. Alioto: If your Honor please, may I continue along that line that your Honor mentioned?

Q. (By Mr. Alioto): Wasn't the Apex Smelting Company trying to buy vanadium oxide?

Mr. Archer: I object to the question as leading, your Honor. He already testified he didn't know about Apex.

Q. (By Mr. Alioto): Is that correct, that you didn't know about Apex?

A. I didn't know about Apex at that time.

Mr. Alioto: Well, at this time, in connection with the questions just asked, I would like to offer

(Testimony of Blair Burwell.) into evidence a request of Apex to Vanadium Corporation of America dated March 11, 1940, for

vanadium oxide,---

Mr. Holland: Same objection.

Mr. Alioto: ——which was just at the time your Honor is speaking of. [600]

The Court: From whom?

Mr. Alioto: From Apex to the Vanadium Corporation of America, requesting vanadium oxide. That will establish whether somebody else was trying to get vanadium oxide.

The Court: Well, you might show that to the proper witness. What does this witness know about it?

Mr. Holland: He is trying to impeach his own witness.

Mr. Alioto: I am not trying to impeach my own witness. The Court just asked the witness whether anybody else—

The Court: The Court has ruled. The Court has ruled. Let's go.

Mr. Alioto: All right.

Now then-

Mr. Holland: The witness said "No."

Q. (By Mr. Alioto): Now then, with respect to the Anaconda matter, you testified, I believe, that you had a conference in which you told them not to make fused black—fused black oxide, but to make red cake instead, is that correct?

Mr. Archer: I object to that. I don't think that was his testimony. [601]

- Q. (By Mr. Alioto): What was your testimony about this conference with the Anaconda officials, Mr. Burwell?
 - A. I will tell you. Let's get it accurate.
 - Q. Fine.
- A. My conference had to do with the kind of material and the method of preparation. It was largely technical. And in so much as the fusing of the material would require an additional expenditure, which they were loathe to do, I suggested that they go ahead and make the red cake, which would still require a fusion operation, and that they deliver the red cake to our plant for fusion, which would make it marketable.
 - Q. (By the Court): Now, when you gave them that recommendation did you do it as an engineer who is supposed to know about those matters, or the officer of some company that was interested in buying it?
 - A. I was both an engineer and executive, your Honor. I walked in both places.
 - Q. You couldn't buy it very well unless it was as you suggested?
 - A. No; we could buy it in any form. We could buy it as ore, if we wanted to buy it. But in this particular case the red cake—they were making red cake, were considering putting it in—making fused oxide, and they were held up [602] from the expenditure of \$200,000 to make a fused—for oxide, and called me into conference about it, and, of course, I recommended, as a good business man,

and also for economic reasons that had to do with my company, and as an engineer, because these things were professional engineering management, here——

- Q. You recommended, then, that they manufacture the red cake, as you call it, because you could use that?
- A. I recommended that they only manufacture their product part way toward the finished product and we would finish it the rest of the way for the market.
- Q. (By Mr. Alioto): Then in May of 1940 did you need to buy red cake?
 - A. No, we never needed to buy red cake.
- Q. So, specifically, as his Honor asked you the question, could you use red cake in May of 1940?
 - A. No.
 - Q. But you bought it anyway, didn't you?
 - A. I testified to that. We did.

Mr. Alioto: We will offer at this time, if your Honor please, the contract between the Anaconda Copper Company and the Union Carbide Company relating to the purchase of the material the witness has just mentioned.

Mr. Archer: What is the date?

Mr. Alioto: The first contract is May 15, 1940, [603] and then there is a letter contract dated December 1, 1942, which takes the entire production for the period beginning January 1, '41, and ending December 31, 1946.

Mr. Archer: No objection.

Mr. Alioto: We will offer this in evidence, if your Honor, please.

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The Court: Admitted.

The Clerk: Plaintiffs' Exhibit 64 admitted and filed in evidence.

(The letter-contracts referred to was marked Plaintiffs' Exhibit No. 64 in evidence.)
[See Book of Exhibits.]

Mr. Alioto: I would just like to call the pertinent provisions of that contract to the attention of the jury.

This agreement is dated May 15, 1940, between the Anaconda Copper Mining Company and the United States Vanadium Corporation, and it is signed, on behalf of the United States Vanadium Corporation, by Mr. Van Fleet and by Mr. Keller on behalf of the Anaconda Copper Company. The agreement provides for the sale of vanadium pentoxide in the form of red cake precipitate. And then the specifications, and then the "Quantity" (reading):

"The entire production of said material of seller's plant at Anaconda, Montana, for a period of two years beginning January 1, 1941, and ending December 31, 1942. Buyer shall have no obligation to purchase in [604] excess of 200,000 pounds in each calendar year, but shall have an option to purchase any part or all of seller's production in excess of 200,000 pounds in each calendar year."

The price of 70 cents per pound of contained vanadium pentoxide.

Then the mode of delivery is provided by letter-agreement dated December 1, 1942, wherein Mr. Van Fleet writes to Mr. Keller of the Anaconda Copper Company and says (reading):

"Dear Sir:

"We desire to confirm the arrangement made with your Mr. F. O. Case, as follows:

"The agreement between us dated the 15th day of May, 1940, relating to the sale by you and the purchase by us of vanadium pentoxide in the form of red cake precipitate, is hereby amended by striking out the first sentence of paragraph captioned 'Quantity,' and by substituting for said sentence the following words: 'the entire production of said material of seller's plant at Anaconda, Montana, for a period of six years beginning January 1, 1941, and ending December 31, 1946.'"

- Q. (By Mr. Alioto): Now then, the vanadium oxide, or the red cake produced [605] by the Anaconda Copper Company was produced as a byproduct, was it not, of their phosphates for fertilizer?

 A. That's right.
- Q. Who was it in your company that requested you to get that production into Union Carbide?

Mr. Archer: I object to the question, your Honor. I think the contract shows it was signed by Mr. Van Fleet, not by Mr. Burwell:

Mr. Alioto: He negotiated it. He already testified to that.

Mr. Archer: I think he has testified that he had

a metallurgical discussion with respect to the process, not that he negotiated the contract.

The Court: I think your exhibit speaks for it-

self. It shows what the contract was.

Mr. Alioto: Well, all right, if your Honor please.

Q. (By Mr. Alioto): Now, further, Mr. Burwell,—

I was going on to another subject of Mr. Archer's cross-examination, the last one, if your Honor please, and will conclude shortly.

The Court: We will take a short recess.

(Short recess.) [606]

Q. (By Mr. Alioto): Mr. Burwell, yesterday you were interrogated by Mr. Archer on a telegram relating to Durango. It reads as follows:

This is Exhibit 37. It is pretty short; your tele-

gram to Mr. Haldane in 1944:

"Brock Advises That Brinker With Sitton and Other Promoters Are Reported to Be Planning to Take the Durango Plant in Case We Do Not Reeapture It. Stop This is Rumor Only But Suggest you advise Mr. Rafferty Regards Blair Burwell."

Now, Brinker and Sitton were well known pro-

ducers in that area, were they not?

A. Yes, of good reputation.

Q. Very substantial producers?

A. That is right.

Q. Men of means who knew the Colorado Plateau and had had a lot of experience on the Colorado Plateau?

A. That is right.

Q. You did not regard them as promoters in

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(Testimony of Blair Burwell.)

the code sense of the word in which you used it?

- A. Of course not.
- Q. You did not regard Continental Ore and Mr. Leir in the code sense of promoters, did you?
 - A. No.
- Q. Mr. Archer interrogated you about the [607] economics of the Plateau with respect to whether you needed a big plant or little plant, and I believe you said that it was the character of the ore rather than the size of the plant that determined the economics of a feasible operation on the Plateau, is that right?
- A. That was the main controlling factors. The plant also had something to do with it, but that was one of the main factors.
- Q. I want specifically to call your attention to the Gateway area, where there was a mill operated by Nisley and Wilson, as the record already shows, and from which Mr. Leir was obtaining part of his supplies. What was the nature of the ore body that was directly tributary to the Gateway mill of Nisley and Wilson?
- A. There were probably, I would say, 800 or a thousand ore bodies tributary to the Nisley-Wilson mill insofar as we would call it ore body. I am talking as a mining engineer. They occurred on these high mesas on each side, and the ore bodies outcropped on the edges of the mesa, and on the top of the mesa was high country. The ore bodies eventually were found to continue underneath the higher cover, and so there are hundreds and hun-

dreds of separate ore bodies that run in one side here and came out four miles away on the other side, and accurately there are a thousand ore bodies, all of which become important, so that a good deal—it is this way, [608] Mr. Alioto—the ore bodies that were immediately accessible on the edges of the hill, like this, were the key to the ore bodies that lay further within. So, precisely, there were thousands of ore bodies.

Q. When you say as a matter of opinion, and in view of your experience on the Colorado Plateau, that, say, a 20-ton a day mill capacity, a mill of 20-tons-a-day capacity was a good, feasible operation in the light of the ore bodies as they existed, particularly prior to the time that you got at the Gateway mines?

Mr. Archer: I object to the question as leading, prior to the time that they got it. Nisley and Wilson did not operate until they finished mining.

Mr. Alioto: That is not true.

The Court: Let the witness testify. Ask him the question directly.

Q. (By Mr. Alioto): What is your opinion as an expert on the Colorado Plateau as to the economic feasibility of the operation of a 20-ton-aday mill at Gateway in light of the ore bodies existing in that area?

A. If you had three per cent vanadium ore and it was less than one-half per cent lime, you could run a 10 to 20 ton mill, and knew your business and knew how to do it—you could maintain a 10

to 20 ton mill a day and make money. If you had 1½% vanadium ore and it was 3% lime, you could not run a 20 ton mill. [609]

Now, there was both 3% ore, 2% ore, 1% ore and a half per cent ore available in thousands of their ore bodies around that area.

- Q. (By the Court): The size of the mill depended upon the character of the ore?
 - A. The character of the ore.
- Q. (By Mr. Alioto): Was there a sufficient quantity of ore in the Gateway area that would have permitted a feasible and economic operation of that mill?

Mr. Holland: At what time, Mr. Alioto?

Mr. Alioto: 1941.

The Witness: As of 1941, as of the period that you are asking me about, and directly concerned with the ownership of lands that existed at that time, I appraised the ore reserves of the Gateway area for the Department of Justice in the Ute Indian land case, and I determined and so reported as a settlement of that multimillion dollar case there was a hundred and sixty some odd thousand tons of ore containing five million, nine hundred and some thousand pounds of vanadium oxide in this portion immediately tributary to the Gateway Alloys Mill. That was this period of time, because the Ute Indian land case involved the ownership at this particular time.

Q. Now, you testified prior to this time that under a leasing arrangement with Gateway Alloys,

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(Testimony of Blair Burwell.)

your company removed certain ore from this particular area, is that correct? [610]

A. I think that is correct.

Q. Do you recall the approximate quantity of ore that you removed from that particular area?

A. I think I already testified to that, Mr. Alioto.

Q. Do you recall the general nature of that ore? Was it a good, high-grade ore?

A. It was the highest-grade ore we could get our hands on.

Q. Was it easily accessible?

A. It was laying on top of the ground.

Q. On the assumption that the United States Vanadium Corporation had not taken that ore out during that period of time, what is your opinion as to whether or not that mill with that ore in place would have been an economical and feasible operation?

A. Of course, it surely could because you can read it here in regard to the reports, that after we took this ore away and moved it to Uravan that there was not 20 tons of ore a day available until more ore was found at a higher expense. Therefore, the first outcrop of easy ore had been removed. It is like you eat the first layer of grass in a pasture. You have to grow more grass.

Q. What was the economic effect of removing that first and easily accessible ore from this Gateway area so far as the Gateway mill was concerned?

A. I testified to that. [611]

Q. All right. The record will speak for itself.

Finally, Mr. Burwell—and I know you have been on a long time and I am happy to say finally, as I am sure you are and so is everybody else—you were interrogated at some length by Mr. Holland, and I think I'm using his exact words here, as to whether you always considered you were a bit a competitor of V.C.A. so far as you were concerned, and I think you said that you did. Did you consider them a bit of a competitor in 1933 when you sold them vanadium oxide and bailed them out of their Peruvian default and deficiencies?

Mr. Holland: I presume, since that is prior to 1938, counsel is trying to open the whole picture again.

The Court: Sustained.

Mr. Alioto: Counsel's question was always. He didn't limit it to 1938. He said "always."

Mr. Holland: When I said "always," I naturally meant within the limits of this case, Mr. Alioto.

Mr. Alioto: That is not what "always" means to me.

If that is the understanding of it, that raises a little different question.

The Court: This case may continue always, but I do not want it to.

Mr. Holland: You wouldn't trip me up on one word, would you?

Q. (By Mr. Alioto): Finally, counsel interrogated you [612] at some length about a situation with respect to a plant at Naturita being closed

from 1932 to 1938. Would you state the reasons why that plant was closed from 1933 to 1938?

Mr. Archer: I object to that.

The Court: Sustained.

Mr. Alioto: I simply wanted to make a record,

if your Honor please.

Q. At the time you left the Union Carbide organization, Mr. Burwell, did they offer you some kind of a consulting contract with certain provisions?

A. They did.

Mr. Archer: I object to this, your Honor.

The Court: How is that material?

Mr. Alioto: Because one of the provisions of the contract was that they would give him this consulting position with reimbursement if he promised not to say anything, and I think that is material.

The Court: That is an improper statement to make in the presence of the jury and you should not make that statement. If you want to ask a question, you may ask him a question.

Mr. Alioto: I have the contract itself.

The Court: Let the contract speak for itself. I do not see how that is material.

Mr. Alioto: February 2, 1948, if your Honor please, and we already had a good deal of testimony concerning that period. [613] This complaint is up to July 15, 1949.

Q. I will show you, Mr. Burwell, a copy of a contract executed by W. E. Remmers, Executive Vice-President, United States Vanadium Corpora-

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(Testimony of Blair Burwell.)

tion, but not executed by you, under date of February 2, 1948, marked "Personal and Confidential."

Would you be good enough to look at that contract and see if that is a document submitted to you by the Union Carbide Company or one of its affiliates?

A. That is correct.

Mr. Alioto: We will offer it into evidence, if your Honor please. First, we will ask that it be marked for identification.

(Whereupon, the contract referred to was thereupon marked Plaintiff's Exhibit 65 for identification.)

Q. (By the Court): What is the date?

A. 1948.

0.00

Mr. Alioto: February, 1948.

The Court: That is after you left the company?

Mr. Holland: You are offering it in evidence only against Union Carbide.

The Witness: Just as I left the company.

Mr. Archer: Have you offered it yet?

Mr. Alioto: No, we are going to have it marked, first, so that we can identify it in this record.

This document has now been identified as [614] Plaintiff's Exhibit 65 for identification. At this time, if your Honor please, we make an offer that it be introduced in the record in this case as evidence on behalf of the plaintiff.

Mr. Archer: I object on the ground it is incompetent, irrelevant and immaterial. The witness has testified he resigned on December 11, 1947,

which was prior to the date of this. The document shows it was not executed, and if your Honor recalls my examination of Mr. Burwell, I carefully avoided the reasons for his leaving the company and I do not think they are relevant to this case, and if we go into that I do not think Mr. Burwell will like it, I do not think I will like it, and I do not think anybody else will like it.

Mr. Alioto: I do not think counsel should make

that statement.

The Court: Objection sustained. Exception allowed.

Q. (By Mr. Alioto): There is just one more question. I anticipate there may be an objection on this, but I would just like to make the record on it.

Mr. Holland: Do you invite us to object?

Mr. Alioto: I do not have to invite you folks to object. You do it spontaneously.

Q. I hand you a series of documents, Mr. Burwell. Would you be good enough to state whether these documents that have previously been offered in evidence and rejected are part of the documents that Mr. Van Fleet handed you that he had taken [615] from the files of the Union Carbide Company?

A. Yes.

Q. And he handed you these sometime in 1947

or 1948? A. That is right.

Mr. Alioto: I understand, if your Honor please, that there is some question about the identification number of these exhibits at the moment. So there

won't be any question as to what we are talking about on the record, these documents are as follows:

A letter from Mr. Van Fleet to Mr. Burwell, dated June 6, 1934, subject, "Paradox Estimates."

(The document referred to was thereupon marked for identification as Plaintiff's Exhibit 67-A.)

A letter of July 26, 1934, from Mr. Blair Burwell, the witness, to Mr. Van Fleet, called "Comparative Estimate on Cost of Erecting and Operating Plants at Uravan and the Site of the V.C.A."

(The document referred to above was thereupon marked for identification as Plaintiff's Exhibit 67-B.)

A document dated July 23, 1934, from Mr. Priestley to Mr. Gormely, copy to Mr. Haggerson and Mr. Price.

(The document referred to above was thereupon marked for identification as Plaintiff's Exhibit 67-C.)

A document dated July 23, 1934, a copy of the same one.

(Whereupon, a copy of the letter dated July 23, 1934, referred to above, was marked for identification as Plaintiff's Exhibit 67-D.)

A document dated August 10, 1934, entitled "Vanadium Situation." It is written by Mr. Van Fleet to Mr. Haggerson.

(The document referred to above was thereupon marked for identification as Plaintiff's Exhibit 67-E.)

A copy of the first document. One of them has certain initials on them.

A document dated April 5, 1934 to Mr. F. P. Gormely.

(The document referred to above was thereupon marked for identification as Plaintiff's Exhibit 67-F.)

When we get that identification number straightened out, I would like the record to show the specific identification number of the documents as they have previously been offered.

(The Clerk marked the above exhibits Plaintiff's Exhibit 67 for identification and they were given the sub-letters by the Reporter subsequently.)

Mr. Holland: These are being offered only against Carbide, is that correct?

Mr. Archer: I object, your Honor.

The Court: Are you offering them in evidence? Mr. Alioto: I will offer them in evidence at this point, your Honor, again in connection with the answer of the witness that the are documents handed to him in 1947.

The Court: Objection sustained.

Mr. Alioto: We have no further questions at this time, if your Honor please. [617]

Mr. Archer: Your Honor, two subjects came up, either through the examination of Mr. Holland or Mr. Alioto that I did not go into on my cross-examination.

One was this request from the plaintiff, Conti-

(Testimony of Blair Burwell.)
nental Ore, to purchase in 1943, in November, 1943,
and the other was this Atomic Energy Program.
I won't waste any time on that, but the first question:

Recross-Examination

- Q. (By Mr. Archer): In 1943, Mr. Burwell, I believe you have testified that, in November, 1943, you had a substantial quantity of vanadium oxide on hand and that you were terminating the Government program, is that correct?
 - A. That is correct.
- Q. By terminating the Government program, you mean the Metals Reserve Company program?
 - A. Yes, not our own operation.
- Q. You do not mean that you were terminating the sludge contracts with them in that district, do you?

 A. No.
- Q. They had just started between May and November, 1943?
- A. Yes. We called that the Secret Contract Account.
- Q. So that operation was just beginning in November, 1943?
 A. That is right.
- Q. And your special secret contract to acquire all the [618] vanadium and uranium-bearing resources had just commenced operation in the early part of 1943, hadn't they?
 - A. Well, that is a matter of record, Mr. Archer.
 - Q. That is right.
 - In Plaintiff's Exhibit 3 in evidence-first, Plain-

tiff's Exhibit 1 in evidence—it shows the United States Vanadium Corporation produced in 1943 a total of 3,059,000 pounds of vanadium oxide. It also shows that in 1943——

Q. (By the Court): Just a moment. What is vanadium oxide?

A. It continually gets mixed up in this conversation, and I am getting confused, but I will tell you how I view it.

There is no such thing as pure vanadium oxide. We have red cake, which is a sodium-vanadium-oxygen combination. We have fused oxide, which is a fused product of the red cake. We do not have vanadium oxide. I mean, that is technically incorrect; so if you do not want to confuse me, you can speak of red cake or fused vanadium oxide and then I can answer.

Q. The exhibit that shows 1943, 3,059,000 pounds of fused vanadium oxide. Now, that is the product from which ferro-vanadium is made, is it not, Mr. Burwell?

A. That is correct.

Q. Plaintiff's Exhibit 3 shows that Union Carbide sold, in 1943, 1,500,000 pounds of ferrovanadium.

A. In 1943. [619]

Q. In 1943. So using your rough kitchen economics or kitchen mathematics that you referred to yesterday, you would divide the vanadium oxide by two to see whether you produced enough vanadium oxide in that year to meet your ferro-vanadium requirements, didn't you?

A. Roughly.

Q. And when you divide 3,059,000 by two, you get roughly a million and a half?

A. A million-three million and a half.

Q. 3,059,000 really?

A. Over a million and a half pounds. Are you referring to that exhibit?

Q. Yes, here are the exhibits.

A. Let me see our own exhibit.

Q. These are the plaintiff's exhibits.

Mr. Alioto: Just a moment. They are answers supplied by the Union Carbide.

Mr. Archer: You will put them in evidence.

Mr. Alioto: There is no question about that, but they are answers supplied by you folks.

The Witness: Are you talking about 1943?

Mr. Archer: 1943.

The Witness: That is right.

Q. So you produced in 1943—

A. That is right. [620]

Q. You sold more ferro-vanadium in 1943 than you produced vanadium pentoxide, fused black oxide to meet your requirements?

A. But the sales of ferro-vanadium, Mr. Archer-

Q. Is that true or false?

A No, that is not true.

Q. You mean these figures are wrong?

A. They don't cover—if you are trying to impeach my testimony—

Q. No, I am just trying to refresh your recollection.

Mr. Alioto: Mr. Archer has cut-off the witness three times in the last thirty seconds, your Honor.

The Court: Just a minute. I think it is proper cross-examination.

Mr. Alioto: To cut-off a witness? All right, if your Honor please.

The Court: Go ahead, Mr. Witness.
The Witness: Let us take 1943——

The Court: Just a minute. Let us get down to the earth where the jury and the Court can understand it.

Q. You produced this much—what was the name of that?

Mr. Archer: Fused vanadium oxide.

Q. Something, about three and a half million?

A. That is right.

Q. And you produced vanadium how much?

Mr. Archer: Well, it is sales, actually, of [621] ferro-vanadium of 1,500,000.

The Witness: That is correct, approximately three million pounds. If you take the direct relationship, and if you consider that that vanadium oxide went directly into sales directly at that time, but usually there is a lag of six months, so the production of 1942 goes into the sales of 1943, and it takes approximately anywhere from three to six months to reconcile the sales of ferro-vanadium with the production of ferro-vanadium because there is always three to six months' lag between the year's production of vanadium in the mines and

(Testimony of Blair Burwell.)
the production of vanadium or the sales of ferrovanadium.

Therefore, what I said at the end of 1943 is entirely correct. At the end of 1943, we had a surplus of vanadium at that particular time. If you go to the next year, 1944, and look at your same figures—

- Q. All right. In 1944 the production of fused vanadium oxide, including Durango, is two million two?

 A. That is right.
- Q. Sales of ferro-vanadium, 932,000, just under one-half the production, isn't it?
- A. Well, you are reading from another sheet. "Union Carbide and Carbon Corporation, Total Tonnage of All Varieties of Vanadium Sold in the United States, Ferro-Vanadium, Vanadium Oxide." In 1943 there was 1,932,000 pounds of ferro-vanadium sold, and that is correct—if this is correct. I can't identify the sheet, [622]
- Q. These are in evidence, subject to correction, whatever the figures show. It shows that you were selling just in ferro-vanadium just about all the vanadium, fused black oxide that you were producing, doesn't it?
- A. On account of the lag of production, I can't testify as to your figures, because you have two separate figures. In 1943—
- Q. Let me say this, Mr. Burwell, I will have these figures checked. I have the inventory figures here. I will have it checked and if there is any

(Testimony of Blair Burwell.) change, I will correct it for the record; is that satisfactory?

- A. I can't on the spur of the moment, on the stand here, check technical figures. I am sure the figures of production are correct.
- Q. Speaking of November, 1943, when you stated you had fused vanadium oxide, you were not the only—when you speak of "you," you mean Union Carbide had fused vanadium oxide on hand?
 - A. Well, Electro Metallurgical Company.
 - Q. Yes. I mean the conglomerate group.
- A. Yes. Well, what stocks they had accumulated. The ferro-vanadium might have gone back over prior years. They may have been selling ferro-vanadium that went back three years, four years. I have known ferro-vanadium, ferro-silicon and [623] other vanadium that went for years unsold in the warehouses before they finally sell it. These things don't relate—ferro-vanadium don't relate to the production of fused oxide that particular year.
 - Q. In November, 1943, Metals Reserve Company had a lot of fused vanadium oxide, too, didn't they?
- A. I don't know what the Metals Reserve figures are. All I know is at the time I testified we had so much vanadium on hand that we were writing those terminal checks to our miners because we couldn't produce any more vanadium. That is my testimony, and I still stay with it. On figures of production, when you get into technical questions of statistics and ask me to give you an answer,

I will be glad to do that, Mr. Archer, but then let us get some time to study it. [624]

Q. (By Mr. Archer): I am referring to November 30, 1943. You remember the exhibit we produced yesterday, which was Defendant U's Exhibit R, I believe, which is the November 30, 1943, report for Metals Reserve showing the production from Nisley & Wilson's Gateway vanadium mill for Metals Reserve, showing a total of 69,280 pounds of vanadium oxide sacked as of November 30, 1943, is that not correct?

A. That's correct. Now, are you asking me if that amount of pack was in the hands of Metals Reserve at that time?

Q. Well, it was either on hand or going to Metals Reserve.

A. Not necessarily, Mr. Archer. This is the year it—it might have been shipped—it might have been used three, four, five months before.

Q. You don't know where it went?

A. Well, this is the total year's production.

Q. Up to November 30.

A. And you can't take November 30th and take the whole year and 11 months behind that and say this is what they have got on hand at that time. This is what is produced in 11 months. And during that 11 months maybe all of that, or two-thirds of that, or 25 percent of it, had been shipped out. Maybe it was in steel by this time.

Q. Do you know where it went?

A. Of course not, I don't know where those

(Testimony of Blair Burwell.)
things went. [625] I wasn't responsible for that kind of a figure.

Q. Now,---

A. I sure know what I had on hand at that time.

Q. Now, you testified, did you not, that you had heard that Union did not want to sell vanadium to Mr. Leir because they wanted to keep him out of the vanadium business?

A. That's right.

Q. Now, who told you this, Mr. Burwell?

A. Oh, I heard that from Mr. Van Fleet, I heard that from—I heard that in a dozen conferences. I don't recall exactly which one—in the building, 30 East 42nd Street, New York City.

Q. Sort of a rumor?

A. It was my business to be in those meetings. They weren't formal meetings. I heard it from Mr. Van Fleet, I heard the reference to Mr. Leir—I had never met Mr. Leir—I knew nothing of his business excepting it came up second-handed—I heard from Mr. Jacobi.

Q. (By the Court): Did any of these corporations, now, that you were connected with, make an order, a formal order on policy to that effect, that you know of?

A. No, your Honor. No smart lawyer would let a corporation make a formal order in writing of that kind of thing. One of our instructions was never to write anything down like that. [626]

Q. (By Mr. Archer): Mr. Burwell, you were

familiar with the fact, were you not, that Metals Reserve Company, United States Vanadium Corporation, acting as agent for Metals Reserve Company, had been selling vanadium oxide to the plaintiff in this action for as much as one year prior to November, 1943?

- A. You're telling me. I don't know about it.
- Q. Didn't you know that?
- A. No, I didn't.
- Q. Who was Mr. Moynihan? A. Who?
- Q. C. J. Moynihan, Jr.
- A. I don't know. There's a Monahan who was one of our clerks.
 - Q. In the accounting division?
 - A. Could have been.
 - Q. Who was W. M. Smart?
- A. Oh, Bill Smart was in the accounting department.
 - Q. W. G. Haldane?
 - A. Already identified.
 - Q. J. V. Hynes? A. Another accountant.
 - Q. T. W. Brock?
 - A. Superintendent at Durango. [627]
- Q. I show you, Mr. Burwell, a letter dated November 14, 1942, United States Vanadium Corporation, C. J. Moynihan, Jr., to Mr. Smart, Mr. Haldane, and Mr. Hynes, to which is attached a copy of a letter dated November 14, 1942, from T. W. Brock to Continental Ore Company, to which is attached a telegram from J. Temple Bridgman,

Executive Vice President, Metals Reserve Company, to United States Vanadium Corporation.

Mr. Alioto: May I see it?

Mr. Archer: I will show it to you.

Q. (By Mr. Archer): Can you identify those signatures?

Mr. Alioto: We will agree to it. We won't have to waste time on that.

This is a government allocation?

Mr. Archer: Certainly; War Production Board allocated all of it.

Mr. Alioto: Not for private sales.

Mr. Archer: Offer it as the next exhibit in order, the letter just referred to.

Mr. Alioto: We have no objection to that spot sale.

The Clerk: Defendant Union Exhibit 2-G admitted and filed in evidence.

(The letter referred to was thereupon marked Defendant U Exhibit 2-G in evidence.)

Mr. Archer: This is a telegram from G. Temple Bridgman, Executive Vice President, Metals Reserve Company, to United States Vanadium Corporation (reading):

"War Production Board Has Allocated Four Thousand Pounds V2O5 contained in concentrates to Continental Ore Company New York. Accordinly You Are Requested to Arrange for Shipment of Sufficient Concentrates to Fill Such Allocation at the Price of \$1.10 Per Pound Contained V2O5

Delivered FOB Railroad Car Continental Ore Company Plant Upon Payment by Certified Checks Payable to United States Vanadium Corporation Agent for Metals Reserve Company. Your Weights Sampling and Analysis to Be Final and Basis of Settlement.

"G. Temple Bridgman."

Mr. Alioto: Can you fix the date of that communication, Mr. Archer?

Mr. Archer: It has no date on it.

Mr. Alioto: Can't you fix it by reference to the letter?

Mr. Archer: November, '42, I am sure.

Mr. Alioto: '42? Mr. Archer: '42.

Letter, November 14, 1942, T. W. Brock, Superintendent, to the Continental Ore Company (reading): [629]

"Gentlemen:

"We are enclosing a copy of a telegram just received from Mr. G. Temple Bridgman, Executive Vice President, Metals Reserve Company, Washington, D. C.

"This is to advise you that we have ready for shipment 4,509.5 net pounds of 88.7 percent V_2O_5 vanadium concentrates containing 4,000 pounds V_2O_5 , and are awaiting receipt of your certified check in the amount of \$4,400 for its release.

"Yours very truly,

"T. W. Brock

"Superintendent."

Letter from C. J. Moynihan, Jr., of the Government Projects Acting Control Division, November 14, 1942 (reading):

"Dear Mr. Smart:

"We are enclosing a copy of a telegram just received from Mr. G. Temple Bridgman, as well as a copy of a letter to Continental Ore Company in connection with this wire.

"As our present average cost of fused product at this location is \$1.48 per pound V₂O₅, we shall appreciate advice from you as to how the amount above the \$1.10 authorized by the wire is to be handled.

"In this instance it will amount to .38 per pound [630] V₂O₅ plus the freight to New York, New York.

"Your very truly."

Q. (By Mr. Archer): Mr. Burwell, I hand you a copy of a letter—

Mr. Alioto: May I see it?

Mr. Archer: It is from Mr. Leir to the United States Vanadium Corporation.

Mr. Alioto: No objection.

Mr. Archer: Dated December 31, 1942.

Offer this as defendants' exhibit next in order.

The Clerk: Defendant U's Exhibit 2-H admitted and filed in evidence.

(The letter referred to was thereupon marked Defendant U Exhibit 2-H in evidence.)

Mr. Alioto: Are you going to read that, Mr. Archer?

Mr. Archer: Yes.

The letter is dated December 31, 1942, from Continental Ore Company, Henry J. Leir, to U. S. Vanadium Corp., Agent, Metals Reserve Company, Durango, Colorado, Attention Mr. T. W. Brock, Superintendent (reading):

"Gentlemen:

"Re: Vanadium Concentrates.

"We wish to refer to your shipments to us of the above material, and should like to draw your attention to the weights of these shipments. [631]

"We found in the two shipments the following shortages:

"First shipment of 27 sacks: Your net weight, 4,561 pounds; our net weight 4,542 pounds; shortage 19 pounds.

"Second shipment, 48 sacks: Your net weight 8,141.40 pounds; our net weight 8,053 pounds; shortage 88.40 pounds.

"So that the total shortage on these two shipments is 107.40 pounds.

"We should very much appreciate your checking the weights on future shipments carefully, in order to avoid such shortages.

"Thank you for your cooperation.

"Continental Ore Company,

"Henry J. Leir."

Q. '(By Mr. Archer): Now, Mr. Burwell, in November of 1943, when you heard that the Union

Carbide had refused to sell vanadium to Mr. Leir, did anyone tell you that Electro Met Sales Corporation had sold vanadium oxide to Mr. Leir in the spring of 1943?

A. Nobody did.

Q. You weren't familiar at all with the Electro

Met Sales Organization, were you?

A. I wouldn't say so. [632]

Q. Well, where were the offices of Electro Met Sales? A. 30 East 42nd Street.

Q. Where were their district offices?

A. One at Pittsburgh,—

Q. Who were-

A. —one in San Francisco. They had one—they had a number in New York.

Q. Who ran the San Francisco office?

A. Oh, I don't recall who ran it. It's a matter of record, Mr. Archer.

Q. But you did hear this story—you do remember hearing the story about refusing to sell vanadium oxide to the plaintiffs, I take it.

A. Oh, yes, I heard that.

Q. You are sure of that.

When was the last time you heard that story—the last time?

A. The last time?

Q. The last time.

A. Well, I left the corporation in '47, and obviously I wouldn't have heard it after that time.

Q. Well, did you hear it before that time, between '43 and that time?

A. I think I testified I did.

Q. Did anybody tell you that in December of 1946 the [633] Electro Metallurgical Sales Corporation had entered into a contract to sell Mr. Leir all his domestic manufacturing requirements of vanadium oxide?

A. What date are you talking about, Mr. Archer?

Q. December of 1946.

A. December of '46?

Q. Yes. A. No.

Q. This was before you left the company?

A. No.

Q. I show you a contract and ask you if you can identify the signatures on that contract.

Mr. Alioto: You don't have to waste time with signatures, Mr. Archer. Just let me see it.

Mr. Archer: Offer it as defendants' exhibit next in order.

Mr. Alioto: We have no objection to this document.

Mr. Archer: Offer this as defendants' exhibit next in order, a contract dated December 10, 1946, between Electro Metallurgical Sales Corporation and the Continental—it is a contract between Electro Metallurgical Sales Corporation and the plaintiff, Continental Ore Company, signed by Henry J. Leir and Herbert M. Rich, in which Electro Metallurgical Sales Corporation agrees to sell and Continental Ore Company of New York, New York, agrees to buy "buyer's domestic [634] manufacturing requirements of vanadium oxide (fused)."

The Clerk: Defendant Union's Exhibit 2-1 [634] admitted and filed in evidence.

(The contract referred to was thereupon marked Defendant U Exhibit 2-I in evidence.)
[See Book of Exhibits.]

Q. (By Mr. Archer): Mr. Burwell, is it still your testimony that it was the policy of Electro Metallurgical not to sell vanadium oxide to the plaintiff in this case?

A. At the time I spoke to you I testified it was

the policy as I heard it.

Q. You mean in November, 1943?

A. That is right.

Q. And that only, only that one month can you testify to?

A. I said at that time.

Q. That's right.

Now, Mr. Burwell, you have testified in regard to the dispute you had, apparently, with some of the people in the uranium industry and with Mr. Gustafson of the Atomic Energy Commission as to the proper way of developing the atomic resources.

A. It wasn't a dispute with Mr. Gustafson per-

sonally.

Q. No. But you disagreed with his policy?

A. I disagreed with the policy that was announced by Mr. Gustafson who spoke, I presume, for the Atomic Energy Commission. [635]

Q. Now, at that time wasn't the dispute this question, Mr. Burwell: simply whether the Atomic Energy Commission was going to exploit foreign uranium resources, keeping the United States ura-

nium resources in this country for future needs, or whether they were going to allow the Colorado Plateau to be exploited?

- A. It wasn't so announced in their—no, to answer your question, it was not.
- - Q. Isn't that right? A. No.
- Q. It wasn't headed by him, but of which he was a member? A. Go ahead.
- Q. Now, wasn't the advisory committee members
 Donald McLaughlin of the Homestake Mining Company—he was one member?

 A. I testified.
- Q. That's right. G. Temple Bridgman, whom we already talked about, and who was head of the Metals Reserve Company, was another member, isn't that right?
- A. Well, I testified, as I recall, two or three. [636] It is certainly a matter of record, Mr. Archer. You can refer to the record.
- Q. Well, Everett de Gaullier of the McNaughton Company in Dallas?
 - A. Yes, I believe he was on it.
- Q. And Antone Gray of Endicott Copper Company?

 A. He was on it.
- Q. Wilbur Judson of the Texas Gulf Sulphur Company?

 A. I don't recall.
- Q. Robert McConnell of the McConnell Foundation?

 A. I don't recall.

O. Fred Searles, Jr., of the Newmont Mining Company? A. I do recall.

O. Clyde Williams, of the Bethel Memorial In-A. I don't recall his name. stitute?

Q. Now, do you know whether these people agreed with Mr. Gustafson's policy or not?

A. I wouldn't know. All I know is the policy that Mr. Gustafson announced.

Q. Referring to your testimony this morning and the red cake, the intermediate vanadium oxide which you procured from the Anaconda Copper Company, was the man you talked to at Anaconda F. O. Case? A. Who?

Q. F. O. Case—C-a-s-e? [637]

A. No.

Q. You said-

A. I did talk to Mr. Case in New York in other conferences. I imagine altogether I was in 20 or 30 conferences at various times, Mr. Archer, in regard to the purchase of this material. Mr. Case -I was in a meeting with Mr. Case in New York. I recall it now that you brought it up.

Q. Do you recall whether the Anaconda Copper Company first approached you for the sale of this product, or whether you first went to them?

A. I don't recall the manner of approach, no.

Q. As a matter of fact, when you got this red cake from the Anaconda Copper Company you used A. We fused it. it. didn't vou?

Q. You fused it in the Rifle plant, is that right?

A. That's right. We didn't necessarily use it.

- Q. What was done with it? Is it still there?
- A. Well, this started—what was the date of the Anaconda contact?
- Q. The contract is May of 1940, I believe, and the first shipment, according to the exhibit, was in 1941. The Rifle plant, you recall, opened in '41.

A. All right (examining document).

Mr. Alioto: If your Honor please, I don't know —may this chart go into evidence that he is looking at? [638]

Mr. Archer: I don't think it is—I don't know anything more about it than you do.

Mr. Alioto: Well, I am just wondering whether it shouldn't go into evidence; if it is a U. S. Vanadium Corporation document and he is looking at it, I think it should go into evidence.

The Witness: I have been troubled by some of these statistics that you have been throwing at me, and here's some of the answers, if you will be patient when examining.

In 1940 we had the difference between 1,000,000 pounds of V₂O₅, 500 pounds of V. that was sold by Electro Metallurgical Company, and 2,400,000 pounds, approximately, that we had either produced or purchased from Anaconda, or—in other words, we had accumulated in that year, as well as the other two years, close to 4,000,000 pounds of vanadium oxide that wasn't sold, or wasn't used, and the vanadium oxide that was purchased in 1940 would undoubtedly be included in our surplus stocks, and there is an unsold surplus of V₂O₅ pro-

(Testimony of Blair Burwell.)
duced in oxide, over the vanadium that was sold
in ferro-vanadium and accumulated over '38, '39,
and '40, of over double our production, and here's
the statistics.

Q. (By Mr. Archer): Then it was-

A. This is prepared by-

Q. Then it was sold in '41 and '42, wasn't it?

A. It was sold when the war came along.

Q. Well, haven't you already testified, Mr. Burwell, it was your practice to produce vanadium oxide in one year and carry it over and put it into ferro-vanadium the next year and sell it?

A. It happened that way. It wasn't our liking to do it, because always when we produced vanadium in excess of our sales we had a problem on our bankers and our accountants, who worried as to whether to lay crews off—

Q. Did you like it in 1943?

A. We never liked it.

Q. All right. Now, Mr. Burwell, I have only one more question. A. Good.

Q. You and I both know who the other promoters were, don't we? A. Yes, I think so.

Q. Do you know whether or not they had any connection with the Continental Ore Company?

A. Oh, no, no.

Mr. Archer: I have no further questions.

Further Redirect Examination

Q. (By Mr. Alioto): One other thing: The fact of the matter is that you did close down your

Uravan plant in the beginning of 1944, didn't you?

- A. That's right. [640]
- Q. And you laid off those miners?
- A. Due to surplus vanadium, yes, sir. We had a warehouse full of vanadium.
- Q. You were looking at a document there. Identify that document for us, would you, please? Where did it come from?
- A. This is a graph—this was prepared under my direction by one of our engineers, Mr. Charles Yetter, after going carefully over the Electro Met Sales, our western production, and all the figures that had to do with our sales and production of vanadium as pertained to our mines out West, and it was prepared at my direction so that we could study and know what our sales problem was to keep the mines running, and this is a document that was prepared for that purpose.
 - Q. (By the Court): When was it prepared?
- A. This was prepared—I think the date of this, your Honor, was about 1944-46—May, 1946, by Mr. Charles W. Yetter, one of our mining engineers.

Mr. Archer: May I ask one question on voir dire?

The Court: Yes.

Q. (By Mr. Archer): Mr. Burwell, this was prepared in connection with the government case in which you were indicted, to show production at [641] that time, and it ends with the period of the government indictment, and was prepared about

the time it came out, and that was the purpose of its preparation, wasn't it? Λ . No.

Mr. Alioto: I will stipulate to that and offer it on that stipulation.

Mr. Archer: Well, Mr. Burwell says "No."

Mr. Alioto: I am prepared to say "Yes." I will take that stipulation and say that is a sufficient foundation for its introduction; that it was prepared by them.

We will offer it in evidence, if your Honor please.

Mr. Archer: I object, your Honor. The man who prepared it is no longer with our company. I don't know whether it is correct. All the production figures for the years '38 to '49 Mr. Alioto has from our company and our accountants, and this will add nothing; it goes far earlier than 1938.

Mr. Alioto: I will offer that portion, then, from 1938 on, so there will be no question about it.

The Court: Objection sustained. It is cumulative.

Mr. Alioto: I don't know whether it is cumulative, if your Honor please, because there are certain figures here of world production, total U. S. imports, and I submit that it puts it in rather graphic form, and would be rather helpful to the jury, if your Honor please. I would like it——

The Court: Objection sustained. [642]

Mr. Alioto: All right, if your Honor please.

The Court: Exception allowed.

Mr. Alioto: May we have it marked for identification?

626

The Clerk: Plaintiffs' 66 marked for identification.

(The graph referred to was thereupon marked Plaintiffs' Exhibit No. 66 for identification.)

Mr. Alioto: And may the record show that the objection was sustained to the Exhibit 66 marked for identification, if your Honor please?

We have no further questions.

The Court: Anything further?

Mr. Holland: No.

Mr. Alioto: May the witness be excused, if your Honor please?

The Court: Very well.

I don't know whether we can get along without you.

The Witness: Thank you, your Honor, for putting up with me for four days on this stand here, and I know it has been as hard on me as it has been on everybody else, and I——

The Court: Adjourn until Monday morning, ten o'clock.

(Whereupon an adjournment was taken until Monday, June 9, 1958, at 10:00 o'clock a.m.)

Monday, June 9, 1958, 10:00 o'clock a.m.

The Clerk: Continental Ore Company, et al, versus Union Carbide Company, et al, further trial.

Mr. Holland: Ready.

Mr. Alioto: Ready.

If your Honor please, I am informed that there is a bit of confusion in the record relating to certain exhibits which were offered and excluded by the Court. Those are exhibits that we believed had been marked earlier but that the identification mark had been somehow misplaced. It now appears that they were not marked, and in order that they may be now identified in the record, I would respectfully request that they be marked Plaintiff's Exhibits 67-A, B, C, D, E and F. This is a series of correspondence between the top managing officials of the United States Vanadium Company, 67-A being correspondence between Mr. Van Fleet and Mr. Burwell dated June 6, 1934—

The Court: Well, it doesn't matter—the order will be made. You will be permitted to have them identified.

Mr. Alioto: All right, if your Honor please. I would suggest, then, that these documents be marked 67-A to -F and that they be preserved in the order and that the record will reflect that these are documents that were offered last Friday in connection with the statement that there appeared to have been some question about whether or not the identification [645] number was on those documents.

(Plaintiff's Exhibits 67-A, -B, -C, -D and -F were marked for identification.)

Mr. Alioto: Now, if your Honor please, in order to complete the record with respect to the certain testimony given by the witness Burwell, we would like to offer at this time, as against United States Vanadium Corporation, certain inter-office correspondence dated September 1, 1938, from Mr. J. R. Van Fleet to Mr. W. G. Haldane, who was the superintendent of United States Vanadium Corporation plant in Uravan, and copy of that letter was also sent to Mr. Burwell.

The Court: What is the date of the letter?

Mr. Alioto: The date of the letter is September 1, 1938. We will offer it in evidence.

The Clerk: Plaintiff's Exhibit 68 admitted and filed into evidence.

(Letter, 9/1/38, Van Fleet to Haldane, received in evidence as Plaintiff's Exhibit 68.) [See Book of Exhibits.]

Mr. Alioto: There is a short paragraph of this letter I would like to call to the attention of the jury. First, to set the background for it, this is a letter from Mr. Van Fleet to Mr. Haldane and to Mr. Burwell dated September 1, 1938. The subject: Sludge, Vanadium. It is an airmail letter marked "Confidential". [646]

"Dear King:

"You will recall, or at least I recall talking with Blair, about the possibility of preparing a vanadium product containing silica, alumina and iron, which could be very cheaply done. I had in mind somewhere around 25c to 30c per pound for the contained V₂O₅. A vanadium product such as this could be reduced directly in the electric furnace with the proper fluxing, resulting in the desired alloy. Fused V₂O₅ can also be used with the proper additions of quartzite, alumina, et cetera, but for

the present, at least, we will not be able to use fused oxide because we cannot charge the regular price for vanadium in the alloy. It is considered that this condition will not last over a great period of time, and that we ultimately can use the fused oxide and charge the regular price for vanadium in the alloy."

Then the last paragraph reads as follows:

"Confidentially, the reason why we must use some product other than fused oxide in this alloy to start with is that we cannot sell vanadium for less than the market price, unless we can show that we do not use fused oxide and that we are using an impure by-product which cannot be used in any other way. For several years I have been trying to have the sales price of [647] vanadium considerably reduced, and this would be an entering wedge. It has always been my opinion that if we were able to reduce the sales price of vanadium, it would encourage its use.

"Very truly yours,

"J. R. Van Fleet."

We offer at this time, and we can call it to the attention of the jury and the Court later, inter-office correspondence from Mr. Kett of Vanadium Corporation of America to Mr. E. D. Bransome, its president, dated June 26, 1941, relating to a conference between Mr. Van Fleet and the writer, Mr. Kett.

Mr. Archer: Are these all V.C.A.?

Mr. Alioto: Yes.

630 Continental Ore Company, et al., vs.

Mr. Archer: V.C.A. exhibits?

Mr. Alioto: That's correct.

Mr. Archer: Offering them against V.C.A.?

Mr. Alioto: Yes.

Counsel has no objection and we will offer the document into evidence, if your Honor please.

The Court: Admitted.

The Clerk: Plaintiff's Exhibit 69 admitted and filed into evidence.

(Inter-office correspondence June 26, 1941, from Kett to Bransome received as Plaintiff's Exhibit 69.)

[See Book of Exhibits.]

Mr. Alioto: We offer as our next exhibit in order [648] a copy already having been exhibited to counsel, a copy of an inter-office correspondence between F. F. Kett, the general manager of the mining division of Vanadium Corporation of America, to Mr. E. D. Bransome, its president.

The Clerk: Plaintiff's Exhibit 70 admitted and filed into evidence.

(Inter-office memo 8/31/41, Kett to Bransome received in evidence as Plaintiff's Exhibit 70.)

[See Book of Exhibits.]

Mr. Alioto: The next document is dated June 13, 1940, between Mr. Robert Sterling of the Vanadium Corporation of America to Mr. Frederick F. Kett of the Vanadium Corporation of America.

The Clerk: Plaintiff's Exhibit 71 admitted and filed into evidence.

(Inter-office memo 6/13/40, Sterling to Kett, received as Plaintiff's Exhibit 71.)

[See Book of Exhibits.]

Mr. Alioto: We now offer into evidence document of the United States Vanadium Corporation. This is inter-office correspondence dated December 27,1941, between Mr. J. E. Weston to Mr. King Haldane relating to the Lyen Ore, so-called. We will offer that into evidence.

The Clerk: Plaintiff's Exhibit 72 admitted and filed into evidence.

(Inter-office memo 12/27/41, Weston to Haldane, received as Plaintiff's Exhibit 72.)

[See Book of Exhibits.]

Mr. Alioto: Finally, we offer into evidence, if your Honor please, a document dated May 10, 1944, written by Mr. Priestley of the Union Carbide group of corporations to Mr. DuDot of the sales corporation in Pittsburgh, to Mr. Remmers, Mr. Lewis and Mr. Portmann, marked "Confidential." It is a document relating—without characterizing it, I will offer it into evidence.

Mr. Archer: What is the date of that?

Mr. Alioto: 1944.

The Clerk: Plaintiff's Exhibit 73 admitted and filed into evidence.

(Letter 5/10/44, Priestley to DuDot, Remmers, Lewis and Portmann, received in evidence and marked Plaintiff's Exhibit 73.)

[See Book of Exhibits.]

Mr. Alioto: This is a rather short letter and I

would like to read a short paragraph from it, from Mr. Priestley.

"There are several reasons for our having made this decision. We are selling ferro-tungsten and tungsten metal powder far in excess of our own supplies of tungsten ore, and to meet this demand, we are purchasing large amounts of ore from Metals Reserve. We are fearful that the trend in supplying ores with combined reducing agents will lead to direct reduction of other metals such as vanadium, columbium, and chromium. As a matter of fact, we have recently [650] refused to supply vanadium oxide and columbite with combined reducing agents on the ground that we are primarily in the ferro-alloy business and are not interested in the sale of ores, especially when we can make use of our large smelting facilities. You can readily understand that we do not want to promote any practice in steel making that would be in competition with our own ferro-alloy business, which we would be doing if we encouraged the reduction of metals from ores by steel makers.

"We may have to sacrifice some business which would go to the people who sell ore in any event, but we will not be breaking down our own business which is smelting ores into ferro-alloys. It will be our task to convince our customers that the most practical and economical way to make steel is to use ferro-alloys.

"I have written you at length on this subject so you will understand the reason for making this policy."

The letter is to Mr. Remmers—the letter is to Mr. DuDot from Mr. Priestley, marked "Confidential".

Mr. Nisley, will you be good enough to take the stand, sir? [651]

FRANK NISLEY,

called as a witness by and on behalf of the plaintiffs, having been duly sworn to tell the truth, the whole truth and nothing but the truth, testified as follows:

Direct Examination

- Q. (By Mr. Alioto): Mr. Nisley, will you be good enough to state your full name for this record?
 - A. My name is Frank Nisley, Jr.
 - Q. Where do you reside, Mr. Nisley?
 - A. In Grand Junction, Colorado.
 - Q. Were you one of the partners in the company Nisley and Wilson that operated at Gateway?
 - A. I was.
 - Q. I think we have the map before you so we can fix this location again. Would you be good enough to point to the approximate location of the mill that you operated at Gateway?
 - A. Yes, the mill is at the junction of West Creek with the Dolores River at Gateway.
 - Q. Mr. Nisley, before we get down to questions relating specifically to the mill operated by you at Gateway, I want to go a little bit into your background of the vanadium industry and what ex-

(Testimony of Frank Nisley.)
perience you have had. Were you, first of all, ever
connected with a vanadium mill at Rifle?

- A. Yes, I was. [652]
- Q. Will you be good enough to point out the approximate location on that map, if you can do it, of that vanadium mill at Rifle?
- A. It is not shown on this map. The mill is about 11 miles northeast of Rifle.
 - Q. It would be in the area beyond the map?
 - A. That is right.
- Q. Were you and your father engaged in some kind of operation there?
- A. My father owned an interest in the Garfield Vanadium Corporation. That corporation owned a large group of claims adjoining the claims of the United States Vanadium Corporation. The company was organized about 1927, about the time the United States Vanadium Corporation began their operation there.
- Q. What year was it that you did some work at the Rifle Vanadium Company mill?
- A. We began in 1938. My father was very interested in trying to find a way of putting that property into operation and he had investigated all the then known milling processes, trying to find some process that could be applied to the property there.
- Q. Did you personally work on some kind of process that could be applied to a small mill property?
 - A. I did. We found that the process that was

the most [653] commonly used in those days was known as the salt roast process. The process itself was not too complicated, the only complicated thing being the roasting requirements.

Q. Would you be good enough to tell us in nontechnical language, Mr. Nisley, what this salt-roast

process consisted of?

A. The salt-roast process consisted of reducing the crude ore to sand-grain size, and then mixing this product with ordinary salt, just like table salt, and roasting that material, forming a sodium vanadate. The salt broke down and the sodium and vanadium combined to form a soluble material, dropping it into water, then draining off the water. The vanadium went into solution and was later precipitated by the addition of a slight amount of sulphuric acid, and it came out in the form of the red cake that has already been introduced.

Q. Yes, we have identified the red cake in one

of these bottles.

Did that process being used at the time require

rather expensive equipment?

A. Most of the plants at that time were using what is known as the Skinner roaster; my father was told by the people who made it that it was not economical to use it in a plant of a size less than about 50 tons per day.

So our problem was to find some type of roaster that we could apply on a smaller scale than that.

Q. Did you do something about that problem, Mr. Nisley?

A. I did.

Q. What is it you did?

A. In 1938, during the time I was in college, I spent quite a little time making a study of it, and in 1939 I dropped out of college and spent all my time in attempting to work out a roasting plant that would do this. We came across a roaster that had been used in the lead and copper industry known as a sintering hearth.

The only problem we had with that was, in the way it was being used in the industry, it was a reducing roast and we needed an oxidizing roast. It took quite a lot of experimental work to convert the roaster to one that we could use.

The sintering hearth is nothing more nor less than—it works like a coal stove with the exception that instead of drawing the air up through the grates, the air is drawn down through the grates. We built a little experimental laboratory model. It was a foot square and consisted of a metal box with grates in the bottom and a duct underneath which was hooked to an exhaust fan. The mixture of crude ore with salt, sawdust and coal was placed on the grates and the coal and sawdust burned in the ore by drawing the air down through it. The roaster was very inexpensive. It was built very cheaply.

Q. Did you in August 1939 make some connection with a mill we have already heard about in this case called the [655] Mesa Vanadium Company?

A. We did. At the time we got through with

the laboratory experiments, we decided to try to carry the experiments on on a little bigger scale, and at the time we didn't have any equipment at Rifle at all. My father was able, together with some other Grand Junction businessmen, to buy a plant that was located at Slick Rock.

Q. Will you be good enough to point out that Slick Rock location for us? We have already had some testimony about that.

A. Yes. It is right at this point where Disappointment Creek meets the Dolores River.

Q. You are showing us that portion of the map marked Slick Rock. What did you do in connection with that Slick Rock mill?

A. Well, the mill had quite a little equipment that we were going to need in our process, so we moved it down there and began to install a larger roaster unit than we had been using in the laboratory experiments. We carried this out and carried the experimental work out to where we thought it was satisfactory, and Mr. Tellum was called in by the Mesa Vanadium Company.

Q. Who was Mr. Tellum?

A. Mr. Tellum was an independent engineer residing in Denver who had had considerable experience in the vanadium [656] industry. He had been formerly employed by the Vanadium Corporation of America in Peru to try to—in the capacity of working out a method of concentrating their ores there. He was called to the plant and spent several days making an investigation of jit, ending up in

a report to the company, which report said that in his opinion the process was satisfactory and he recommended the type of equipment then that should be put in, what we already had, in order to put it in operation.

Q. You then did put that in operation?

A. The Mesa Vanadium people were offered an agreement by Mr. Simpson and Mr. Claybaugh, who were contractors and experienced mill people that they would put in the necessary equipment and operate the plant for an interest in it, and this offer was accepted.

Q. After that did the United States Vanadium Corporation figure in this operation in any manner? A. They did.

Q. What happened?

A. The first product that was made there was shipped to the United States Vanadium Corporation.

Q. (By The Court): Was shipped out?

A. Yes. A few days after that a meeting was called by Mr. Claybaugh of Mesa Vanadium Company and I was asked to attend and he explained at that meeting that—— [657]

Mr. Archer: Your Honor, I think this is getting into the realm of hearsay and I object to it.

The Court: Yes.

Q. (By Mr. Alioto): Regardless of what may have been said at that meeting, Mr. Nisley, what happened after that meeting, so far as any par-

(Testimony of Frank Nisley.) ticipation of United States Vanadium Corporation was concerned?

A. The United States Vanadium Corporation made an offer to the Mesa Vanadium Company to take over the plant. They would do some more experimental work there, and in the meantime use it for a stockpiling plant. They would pay them, I believe it was, five cents a pound royalty on all ores that were stockpiled.

- Q. Did they take over the plant?
- A. They did.
- Q. What happened after that?
- A. I never operated after that.
- Q. Where did you go after that?

A. I went to Rifle. During the time I had been working at Mesa Vanadium Plant, Rifle Vanadium Corporation had installed this milling equipment there. At that time there was a market for any vanadium ore that would run in excess of five percent V_2O_5 and they were trying to mechanically concentrate the ore there. It had not proven a success, and so I went there to install the rest of the equipment along with the equipment in [658] the plant already there.

- Q. In other words, you installed the type of equipment that had been used down at Mesa?
 - A. That is right.
 - Q. What happened there?
- A. Well, we got into production in the spring of 1940, just prior to the Embargo Act, and we were being offered \$1.35 a pound for material then.

- Q. In what market?
- A. Well, it was foreign market.
- Q. What was the price in the local market at that time?
- A. Well, about 65 to 70 cents a pound. The Embargo Act went into effect just prior to our first shipment, and so we lost our market for the product then.
- Q. Then did you have some connection with a company called the Loma Vanadium Mill?
- A. Yes. To tie these together, at the time we lost our market, we applied for a local market and finally found one through Mr. Balsley, who was buying for the Vitro Chemical Company. He bought our product at 70 cents a pound and so we closed the Rifle plant down because we couldn't operate at that price, and looked for another outlet for our material. It was during that search that we got in touch with Continental Ore Company.
- Q. And Mr. Henry J. Leir, the president of that company? [659]
 - A. Mr. Leir came to Rifle.
- Q. Without going into any conversations you may have had with Mr. Leir, did you make some kind of arrangement with Mr. Leir at that time?
- A. He agreed to buy our product at, I believe it was, a dollar a pound for the fused vanadic oxide.
- Q. Was that higher than the price on the local market at that time? A. Yes.
 - Q. Approximately how much higher?

- A. I would say about 20 cents a pound higher.
- Q. What did you do with this arrangement under Mr. Leir? Just state the facts with respect to that.
- A. As I previously stated, we were closed down at the time, and Mr. William Morrison had become interested in the area around Yellow Cat, and he had decided--
- Q. Can you point out on the map where the Yellow Cat area is?
- A. Yes. It is in this district below Thompson, right in through here.
- Q. It is in the district that is called Thompson on the map, the northernmost part of the map, is A. That is right. that it?
- Q. Did you have some connection with that company?
- A. Mr. Morrison-of course, at that time the ore in [660] the Yellow Cat district was being mined for the high grade—for high grade ores. There was no market for mill ores. The high grade ore was being purchased by Mr. Balsley.
 - Q. For Vitro?
 - A. For Vitro Chemical Company.
 - Q. Vitro was a ceramic company, is that right?
- That is right. Mr. Morrison was mining ore there and he decided he would build a mill to furnish a market for the mill grade ores.
- Q. Was the United States Vanadium Company buying-

The Court: Who was Mr. Morrison?

A. Mr. Morrison was an independent operator, your Honor.

Q. (By Mr. Alioto): Now, was the United States Vanadium Corporation buying any mill grade ore in the Yellow Cat district at that time!

A. Not at the time Mr. Morrison started his operations.

Q. Then Mr. Morrison built a mill, did he!

A. He did. He contacted Mr. Tellum in Denver and Mr. Tellum recommended to him that he use a process that we had been using at Rifle, and that he, Mr. Tellum, suggested further that he contact—

Mr. Archer: Your Honor, I object to the conversation with a man in Denver.

Q. (By Mr. Alioto): Without going into the conversation, as a result of that conversation, was there a contact [661] made between you and Mr. Morrison?

A. Mr. Morrison contacted me and asked me if we would do the experimental work on some of his ore to see if the process was amenable to treatment of this ore, which we did.

Q. Did you do that work? A. I did.

Q. And did you come to a conclusion about whether the process was feasible for that ore?

A. I did.

Q. What was that conclusion?

A. Mr. Morrison decided to install the equipment and asked me if I would go to Loma with him and help him get started.

Q. Did you install that equipment at Loma?

- A. We did.
- Q. At the time you installed that equipment at Loma, was the United States Vanadium Corporation buying ore in the Yellow Cat district?
 - A. Not at the time we started.
- Q. Then did you start to produce vanadium oxide in that mill?

 A. We did.
- Q. Did you make any arrangement with the plaintiff, the Continental Ore Company at that time?
- A. Well, I had after the contact with Mr. Leir—he wrote [662] us confirming his offer and I put Mr. Morrison in contact with Mr. Leir.
- Q. Was an arrangement made to sell that ore to Mr. Leir and the Continental Ore Company?
 - A. There was.
 - Q. Then what happened?
 - A. The plant was reducing vanadic oxide.
 - Q. What capacity was the plant?
 - A. About 10 tons a day.
 - Q. Ten tones of ore per day?
 - A. Of ore per day.
 - Q. Then what happened?
- A. Well, in making a report to Mr. Morrison, there were some mechanical things in the mill that I felt should be changed, and I made a report telling him his recoveries could be increased considerably by certain changes.
- Q. At the time of that report was United States Vanadium Corporation buying in the area?
 - A. The United States Vanadium had established

an ore-buying station at Thompson and they were beginning to purchase ore in the area.

- Q. Where was the closest mill of the United States Vanadium Corporation from that ore-buying station at Thompson?
 - A. Well, it was at Uravan.
- Q. Down in the area of Uravan, and the ore station was established at Thompson? [663]
 - A. That is right.
- Q. And the Loma mill was right next to the ore bodies, was it?
- A. No. The mill was approximately just outside of Urayan.
 - Q. Were those ore bodies tributary to the mill?
 - A. They were.
- Q. And what happened after the United States Vanadium Corporation started buying there?
 - A. Mr. Morrison told me that he-
 - Mr. Archer: I object to any conversation.
- Q. (By Mr. Alioto): Regardless of what he told you, just tell us what happened. Did Mr. Morrison continue that operation?
 - A. No, Mr. Morrison sold the operation.
 - Q. To whom? A. To Mr. Ackerman.
 - Q. Did he continue it?
 - A. Well, I left Mr. Morrison just prior to the sale to Mr. Ackerman.
 - Q. Do you know whether the mill was in operation? When did you leave?
 - A. I left in December of 1940.

- Q. Do you know whether that mill was in operation seven or eight months later? [664]
- A. It was not. We bought the equipment from the mill about eight months later.
- Q. The mill itself had closed down and you bought the equipment, is that it?
 - A. That is right.
- Q. Getting down to your partnership arrangement with the Gateway Alloys, did there come a time in 1941 when you formed a partnership for the purpose of operating the mill at Gateway?
 - A. There did.
- Q. Who were your partners in that arrangement, Mr. Nisley? A. Mr. Hayes Wilson.
 - Q. What was his background?
- A. Mr. Wilson had been associated with us in the plant at Rifle.
- Q. Did you make some kind of arrangement to operate a mill there?
- A. Yes. During the time I was employed at Loma, Mr. Brown, who was the manager of the Gateway Alloy Company, had spent a lot of time watching this plant in operation, and he approached me as to whether I would be interested in going to Gateway and installing roasting equipment there.
 - Q. Did you agree to do that? A. Yes.
- Q. Did you then form this partnership with Mr. Wilson? A. That is right. [665]
- Q. Did you then install the equipment in the mill?
- A. Yes, Mr. Wilson and I made a contract with

the Gateway Alloys Company and installed the roasting equipment in the plant. [665-A]

- Q. Would you give us some description of that mill, Mr. Nisley, with respect to its capacity and its general physical attributes?
- A. Well, the mill was—the crushing equipment and accrued ore—I mean, the ore equipment was capable of processing probably 30 to 50 tons a day. The only limiting factor there was the roasting equipment. And it was a well-built, little plant.
- Q. Did you install any roasting equipment in it?

 A. Yes.
- Q. Now, then, approximately when was it that you began operations in Gateway?
- A. We began installing equipment, I believe, in April of 1941, and due to road conditions there we were unable to actually start operations until, I believe it was, around May 20 of that year.
 - Q. May 20 of 1941? A. That's right.
- Q. Before we get into your operations, Mr. Nisley, would you be good enough to state the facts, for the record, respecting the ore bodies that were tributary to that mill?
- A. At the time Mr. Wilson and I made the investigation for the plant, it was our conclusion that there were large ore bodies tributary to the plant, within a distance of 18 to 20 miles in all directions. Gateway gets its name from the fact that a lot of these canyons from these plateaus lead right into Gateway, and it's just a natural spot for a mill because of that condition. And, of course,

there was a good water supply there, which was unusual. It was closer to Grand Junction than any other mills were at the time. There were large bodies of high-grade ore being mined there previous to that time.

- Q. Now, we already have some testimony from Mr. Burwell about that area, Mr. Nisley, so there is no sense in repeating it. But let me ask you whether you were aware at the time that you started operating here that the United States Vanadium Corporation was mining the Gateway ore deposit?
- A. Mr. Brown had told us, at the time we asked whether he would be interested in going down there, that he had leased the mines of the Gateway Alloys to the United States Vanadium Corporation until July 1 of that year, 1941.
- Q. All right, you started operation about May of 1941, is that it?

 A. That's right.
- Q. Then did you have an opportunity to observe the mining being done there by the United States Vanadium Company?
- A. We did. We went over and looked over the mines while we were at Gateway.
 - Q. What were they doing there?
- A. Well, the property had been previously mined for high-grade ores, and the lower-grade mill ores had been placed on [667] dumps there by the miners. There was a lot of that type of ore there. And, of course, the United States Vanadium was picking up that ore and hauling it to the

Uravan—they were stripping the easily accessible ore inside the mines and taking it—

Q. You say they were hauling that ore to Uravan. Would you be good enough to tell us how far Uravan was, approximately, from that ore deposit, the Uravan mill of United States Vanadium Corporation, that is?

A. Well, from the Gateway Alloy property there is a couple of deep canyons that had to be crossed—

Q. Just trace it out on that map, if you will, sir.

The Court: Just answer the question, how far was it?

A. It was about, I think, 35-40 miles the way

Q. (By Mr. Alioto): Over what kind of territory?

A. Very rough terrain.

Q. And how far was your Gateway mill from that deposit?

A. About 18 miles.

Q. Then did you have some kind of arrangement with the plaintiff company at the time you started your operations at the Nisley and Wilson plant at Gateway?

The Court: Pardon me just a moment. I didn't get the name of this witness.

Mr. Alioto: Frank Nisley.

The Court: How do you spell it? [668]

Mr. Alioto: N-I-S-L-E-Y.
The Court: N-I-S-L-E-Y?

Mr. Alioto: Correct. Frank Nisley. His partner's name was Hayes Wilson.

The Court: All right.

- Q. (By Mr. Alioto): Now, the question is at the time you started in at the Nisley and Wilson plant, did you have some kind of an understanding with the Continental Ore Company or were you selling your materials elsewhere?
- A. Well, Continental Ore had, of course, been buying—had offered to buy the product, I think, at a dollar a pound.

The Court: I didn't get you.

- A. I said the Continental Ore Company at that time had offered to buy the product at a dollar a pound. Mr. Brown, who was the President of Gateway Alloys, had contacted United States Vanadium, and they made the same offer, that they would buy it from us at a dollar a pound for the fused vanadic oxide. Mr. Brown, however, removed the fusing plant from the mill, so we started out—we were making only the red cake, and United States Vanadium offered to buy that, I believe, at 90c a pound, the red cake.
- Q. (By Mr. Alioto): Did you make a deal to sell that to United States Vanadium?
 - A. We did.
 - Q. What happened? [669]
- A. We got into production of the red cake along about the latter part of May, and we operated during the first part of June, and Mr. Brown con-

650

(Testimony of Frank Nisley.)

tacted United States Vanadium and told them that we had——

Mr. Archer: I object to what Mr. Brown told him.

The Court: Who is Mr. Brown?

A. Mr. Brown, your Honor, was the President of Gateway Alloys Company.

The Court: Not one of the defendants or in any way connected with any of the defendants?

A. No, sir.

The Court: The objection will be sustained.

Q. (By Mr. Alioto): Was he working for U.S.V. at this time, Mr. Nisley?

A. He wasn't at this time.

Q. Now, without telling us or getting into any conversation that Brown may have had with U.S.V., did you in fact agree to sell your red cake material to U.S.V.?

A. As a result of Mr. Brown's trip, an engineer from U.S.V. came to our plant.

Q. What did he do?

A. He sampled the material and weighed out everything that we had made up to that time.

Q. Do you remember his name?

A. Sandy Sterns. [670]

Q. He was employed by U.S.V.?

A. He was employed by U.S.V.

Q. And what happened when he sampled that material?

A. A few days later we got a report from the United States Vanadium telling us the material

was satisfactory and we could deliver it at any time.

Q. Did you deliver it? A. We did.

Q. What happened?

A. The day I delivered it, they were unable to weigh it and sample it, and they asked that we leave it and come back in a couple of days.

Q. Did you come back in a couple of days?

A. I did.

Q. And what happened?

A. They had already fused it out; the material was gone. A few days later we got their report of the weights and assays, and these were very much shorter than the weights and assays that had been given us by our own chemist at Gateway.

Q. What happened then?

A. Well, we objected to the settlement but there wasn't anything done about it.

Q. As the result of that experience did you come to any conclusion about marketing?

A. Yes. We decided to close the plant down and to hunt [671] another source, another outlet.

Q. Did you find another outlet?

A. Yes, we did.

Q. Who was that outlet; what was that outlet that you found?

A. We contacted Continental Ore Company and they agreed to take the product then at a price, I believe, of \$1.03½ a pound.

Q. They agreed to take the total output?

A. That's right.

Q. Then what did you do?

A. We installed a fusing plant then so that we could ship the material and they would buy it.

Q. About when did you complete the fusing plant?

A. The latter part of September of that year; we got into operation again about the 1st of October.

Q. Now, the fusing plant was a plant that converted the red cake into fused oxide, is that it?

A. That's right.

Q. As of that time, in September of 1941, had the United States Vanadium Corporation completed its mining on the Gateway properties under that lease? A. It had.

Q. Did you have a chance to observe that mine after they got through with it?

A. Well, the properties were stripped of all the available [672] ore that was easily accessible.

Q. Did you see that? A. I did.

Q. Did you walk on the property and look at it at that time? A. I did.

Q. Is that what you observed?

A. That's right.

Q. Then did you start producing for the plaintiff company, the Continental Ore Company?

A. We did.

Q. About when? A. In October of '41.

Q. Now, at this juncture, do you have with you, Mr. Nisley, the amount that you produced privately up until the time that you made the Gov-

ernment contract that we will come to in a moment?

A. Yes, I do.

Q. Would you be good enough to read into the record what your production of vanadium oxide was for that period?

A. During that period, we produced for the account of Apex Smelting Company-Continental Ore Company 33,115 pounds of vanadic oxide. That is the net V₂O₅. And we produced for the account of Vanadium Corporation of America 10,618 pounds of fused vanadic oxide.

Q. Your total production was approximately 43,000 pounds? [673]

A. Plus the amount that we shipped to the United States Vanadium Corporation—I can't re-call exactly what that was—in the neighborhood of 5,000 pounds.

Q. Now the amount that you shipped to U.S.V. was in the form of red cake? A. Red cake.

Q. Is that it? A. That's right.

Q. And the amount that you shipped to Continental Ore Company and 10,000 to the Vanadium Corporation of America was in the form of oxide?

A. That's right.

The Court: What is the form of oxide?

A. It is the red cake melted, your Honor. It consists merely of melting the cake into what we call fused vanadic oxide.

Q. (By Mr. Alioto): I show you a bottle of material. Would you be good enough to state wheth-

(Testimony of Frank Nisley.)
er that is the fused vanadic oxide of the type that
you produced?

A. It is.

(Counsel referring to Plaintiff's Exhibit 31 for identification.)

- Q. When you started to operate at Gateway, in the fashion in which you have described, what was your source for getting the ore?
- A. The Gateway Alloys mines, as I previously testified, had [674] been pretty well stripped, and it was taking quite a little time to get those mines back into operation, and we were also buying from independent mines in the area. We—as I previously stated—we got started in October, and the winter months there are quite rough to move ore over the roads, and we had a rather intermittent operation from October until March 20th, the following year, at which time we were forced to close down entirely for a period of two months, until the roads opened up again.
- Q. From whom were you buying; what is the nature of the companies or the miners from which you were buying that ore in that period?
- A. We were dealing with approximately 20 or 30 independent miners, as well as with Gateway Alloys. They were trying to get their mines back into operation.
- Q. Were these miners who had been in the area a long time or had they started up recently?
- A. No. The only market they had for their ore prior to that time was for high-grade and we, of

course, opened up a market to them for the mill-type ore.

Q. About how many of those miners were you buying from?

A. I would judge between 20 and 30, small miners.

Q. When you say you closed the mill down in March of 1942, did you reopen it shortly thereafter?

A. Yes. We opened it about the 20th of May, the same year. [675]

Q. And did you continue to buy from the independent miners at that point?

Q. Who stopped?

A. Mr. Burwell of the United States Vanadium.

Q. Did you know who he was at that time?

A. Yes, A did.

Q. What happened?

A. He called this independent miner over from the scales to the road and talked with him for a little while. And when he came back, he told me that Mr. Burwell—

Mr. Archer: I object to what the miner told him.

Q. (By Mr. Alioto): Regardless of what the miner told you—don't tell us that because that is

hearsay-he went over and talked to Mr. Burwell.

Now, he had his ore, you say, on your scales?

- A. That's right.
- Q. And he came back, and what did he do? Tell us what he did. Don't tell us what he said. Tell us what he did.
 - A. He told me that he had been over-

The Court: Don't-

Mr. Alioto: Don't tell us what he told you; just tell us what he did. Did he leave the ore there with you and sell it to you?

- A. He did that load.
- Q. And then what happened after that?
- A. He told me that if we couldn't-

Mr. Archer: I object to what he told him, if your Honor please.

- Q. (By Mr. Alioto): Regardless of what he told you, did you thereafter buy from that miner?
 - Λ . No, that miner left us.
 - Q. Where did he sell thereafter?
 - A. To the United States Vanadium.
- Q. Now, approximately where was he located on that map?
- A. At that time, he was mining in the John Brown area.
 - Q. And how close was he to your mill?
 - A. About 12 miles.
 - Q. And how far was he from the Uravan mill?
 - A. Around 40 miles.
- Q. Were there other miners who did the same thing at or about that time, in June, 1942?

- A. Yes, We began to lose a number of our small miners.
 - Q. Lose them to whom?
 - A. To U. S. Vanadium.
- Q. Now, at that time, do you know whether or not the United States Vanadium Company was acting as an agent for Metals Reserve? [677]
 - A. I found out later that they were.
- Q. Do you recall approximately how many miners were taken away from you in that fashion?

The Court: Now, was this during the war period?

Mr. Alioto: This was during the period of time when United States Vanadium was acting for Metals Reserve, if your Honor please, in June of 1942, which is the date that the witness has fixed.

- Q. Approximately how many miners then stopped delivering to your mill at Gateway and started delivering down to Uravan at the United States Vanadium mill?
- A. Well, all that had been delivering to us except the Gateway Alloy Company.
 - Q. In other words, you lost every one of them?
 - A. We lost every one of them.
- Q. Now, then, as a result of having lost—now, we don't want any conversation with any third parties, Mr. Nisley. There would be a temptation to go into them here in the natural course, but there is a rule against that.

As a result of having lost all those mirers, what happened to your production in the mill?

A. We were cut back to only being supplied by the Gateway Alloy Company. As I previously stated, their mines had been stripped and they were not producing very heavily.

Q. So what happened? [678]

A. We had an intermittent operation. We had to just mill ores that came in. Later we were forced to close down entirely.

Q. About when did you close down entirely, approximately?

A. Well, the final shutdown, I think it was about October.

Q. Of '42? A. '42.

Q. Now on or about October of '42 did you have a meeting with Mr. Blair Burwell?

A. We did.

Q. Did you understand at the time that in addition to running the United States Vanadium Company he was supposed to be the agent for Metals Reserve?

A. During this time, we had gotten in touch with the War Production Board and the Metals Reserve Company in Washington and found—they referred us back to Mr. Burwell.

Q. Did you get any help from the Continental Ore Company in connection with this matter?

. A. Yes. We notified them that our output would be cut considerably and asked their help in trying to help us obtain some relief.

Q. Did they do something for you?

A. They did.

Q. What did they do?

A. They made contact also with the War Production Board, with Metals Reserve Company.

Q. Now, as a result of this, did you have a meeting with Mr. Blair Burwell?

A. We did.

Q. Do you recall where that meeting was held?

A. In Grand Junction.

Q. Do you recall who was present?

A. Myself, my partner, Mr. Wilson—I believe John Hill and Mr. Burwell.

Q. Now, John Hill was another employee of the United States Vanadium Company, wasn't he?

A. He was.

Q. You knew at this time, of course, that they were supposed to be agents for Metals Reserve as well as running the United States Vanadium Company, didn't you?

A. We did.

Q. Now tell us, as best you remember, the substance of the conversation that took place in that office.

Mr. Holland: This is not being offered against the Vanadium Company?

Mr. Alioto: No, it is not. Not at the moment.

A. We had found out during this time, by letters to the War Production Board and answers from them, that the United States Vanadium was offering a subsidy of 10c a pound to miners.

The Court: I didn't get your answer.

A. We had found during the course of our investigation [680] with the War Production Board

and Metals Reserve Company in Washington that the United States Vanadium Corporation was paying a subsidy of 10c a pound to the miners for the ore.

- Q. (By Mr. Alioto): The miners in your area?
- A. The miners in our area.
- Q. Yes.
- A. And we were trying to negotiate the same sort of an agreement whereby we would be allowed to pay the subsidy through the Metals Reserve Company to the miners.
- Q. You negotiated this agreement with Mr. Burwell?
- A. We were trying to negotiate this agreement with Mr. Burwell.
 - Q. What did Mr. Burwell say to you about that?
- A. Mr. Burwell told us that the only kind of an agreement that he would recommend was one whereby we would be furnished the ore by Metals. Reserve and turn the material back to the United States Vanadium.
- Q. Turn your vanadium oxide over to United States Vanadium? A. That's right.
- Q. Did you say anything in this conference about the Continental Ore Company or your desires in the matter?
- A. We did. We told them that we would rather continue operating as an independent than to go under this type of arrangement.
 - Q. What did he say to that? [681]

A. He said he wouldn't recommend anything but this sort of an arrangement.

Q. Did he specify what that arrangement would contemplate, did he call it a toll arrangement or toll agreement?

A. Yes. He told us that if we would get in touch with Mr. DeWitt Smith of Metals Reserve Company in Washington and offer to mill this ore on a toll agreement whereby they pay so much a pound for milling it, he would recommend and follow it through.

Q. Tell us of the toll agreement so that we will understand it.

A. Well, the agreement he suggested was that the ore be stockpiled at our plant, be purchased by the Metals Reserve Company for the account of Metals Reserve Company through the United States Vanadium Corporation; that they would deliver the ore, to our plant; it would remain in their possession, remain their property during the time it was being processed through our plant, and that the product would be returned to them.

Q. What product, the vanadium oxide?

A. The vanadium oxide.

Q. Returned where? Specifically, where was it physically going to be returned?

A. To the United States Vanadium Corporation.

Q. This was in October of 1942?

A. October the 2nd, as I recall, 1942. [682]

Q. Did you and your partners then agree to make a toll arrangement?

A. There wasn't anything else to do. We finally agreed to do this.

The Court: You were being paid, then, so much for milling it?

A. We were paid so much a pound for milling * it, your Honor.

The Court: All right.

Q. (By Mr. Alioto): Now, then, the conference took place in October. About when was it that you finally got your toll agreement?

A. The signed toll agreement was finally delivered to us about February the 3rd or 4th, the following year. [683]

Mr. Alioto: Will you please mark this for identification?

(The document referred to was thereupon marked Plaintiff's Exhibit 74 for identification.)

- Q. (By Mr. Alioto): Mr. Nisley, I show you a document which has been marked Plaintiff's Exhibit 74 for identification. Will you be good enough to examine the document and state whether that is the toll agreement that was signed as you indicated?

 A. It is.
- Q. During that period from October of 1942 when you were negotiating this with Mr. Blair Burwell and Mr. John Hill, did the plant operate from October to January?

 A. No, sir.
 - Q. It closed down entirely?

- A. It closed down entirely.
- Q. After you received this agreement, you began operation under the toll agreement?
- A. We began operation about the latter part of March, the first of April.
- Q. Do you have with you the figures of your production under that government toll agreement?
 - A. Yes, I do.
- Q. Will you be good enough to read them into the record, please, Mr. Nisley? [684]
- A. During this period in black oxide we delivered to United States Vanadium Corporation about 88,729 pounds of fused vanadic oxide. In addition to that, of course, there was clean-up material and other materials.
- Q. Prior to receiving the toll agreement, which is 74 for identification, Mr. Nisley, had there been any other recommendation by any government personnel, somebody employed directly by the government, about what should be done with that mill?
- A. Yes, when we first contacted—we first made contact with Oscar Chapman, the Secretary of the Interior, and he told us—

Mr. Archer: I object to that.

- Q. (By Mr. Alioto): Regardless of what he told you, did somebody come out from the government to investigate the matter?
 - A. Mr. Whittaker.
 - Q. Orville Whittaker?
 - A. Orville Whittaker.

- Q. Will you be good enough to identify Mr. Whittaker for the record as to just what he was?
- A. Mr. Whittaker had been employed by the Metal Reserves Company as an umpire in these matters.

The Court: Just a moment. We will take a recess.

(Recess.)

- Q. (By Mr. Alioto): Mr. Nisley, there are a few things I want to clarify before we take up your testimony at the point where we left it. First of all, you testified that in order to convert the red cake into the black or the fused oxide, you installed some fusion equipment.

 A. We did.
- Q. What was the price of that fusion equipment to do that job?
 - A. Approximately a thousand dollars.
- Q. Approximately a thousand dollars and that did the job? A. That did the job.

The Court: How much?

The Witness: \$1,000.

- Q. (By Mr. Alioto): Mr. Nisley, you testified about certain miners who stopped delivering to you in about June of 1942. For how long a period of time had you been buying from those miners? For how long had they been your customers?
- **Λ.** We began to buy from them in April of 1941 and we continued until about June, 1942.

The Court: When they ceased supplying you, they sold theirs to an agency of the government, was that it?

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(Testimony of Frank Nisley.)

The Witness: Yes, in 1942.

- Q. (By Mr. Alioto): In other words, they sold it to Metals Reserve Company through the United States Vanadium?

 A. That is right, [686]
 - Q. Which was the agent for the Metals Reserve?
 - A. That is right.
- Q. You continued under the government program for approximately how long a period of time?
 - A. Until December 31, 1942.
- Q. During the time that you were operating under the government program, did you have occasion to talk to Mr. Burwell? A. I did.
- Q. Did you have occasion to tell him where you wanted your material sent, even after it was sent down to Uravan?
 - A. It was being delivered to Grand Junction.
 - Q. Grand Junction?
- A. At the time we entered into the toll agreement, we asked that our product be sent to Continental Ore. We wanted to continue that relationship so we would have a post-war outlet for our material.
 - Q. Did vou tell Mr. Burwell that?
 - A. We did.
- Q. Do you know whether or not during the period of your production the Continental Ore Company received all the black oxide that was processed in your plant? Do you know anything about that?

 A. No, I do not.
- Q. Approximately when was it that you received notification from anybody connected with

the United States Vanadium Company [687] that your contract would be terminated?

- A. In November, 1943, we received a letter from John Hill stating that this was not firm yet but he felt that our contract would not be renewed after December 31st of that year.
- Q. When were you officially notified that your contract would not be renewed?
- A. A few days later we received a letter stating it would not be renewed, and that was prior to December 1, 1943.
 - Q. Prior to December 1, 1943?
 - A. That is right.
 - Q. Why did the government contract terminate?
- A. The government—or the Metals Reserve quit supplying ore to us on December 31, 1943, and we went ahead and milled whatever was on hand and cleaned the plant up early in 1944 and closed it down.
- Q. At the time Metals Reserve terminated your contract, did they also terminate the contract they had with V.C.A., the Vanadium Corporation of America?
- A. No, they did not. We protested that we were shut down first. They shut us down before any of the other plants were shut down.
 - Q. Did you protest to Mr. Burwell?
- A. We protested to the Metals Reserve in Washington.
- Q. Did you ever talk to Mr. Burwell and Mr. Hill about that?

- A. Yes, we told them we objected to it. [688]
- Q. Did you know at that time who made the recommendation to Metals Reserve about closing down your plant? A. No.
- Q. In any event, the plant closed down shortly after January 1, 1944, did it? A. Yes.
- Q. At that time did you take up any contact with the Continental Ore Company?
 - A. We did.
- Q. Did you come to some understanding with them as to what they would do?
- A. They told us they would buy all the material that we could produce.
 - Q. All the material that you produced?
 - A. That is right.
- Q. Did you go back into business privately after January 1, 1944?
 - A. No, we did not.
 - Q. Why not?

The Court: Just a moment. What is your question again?

Mr. Alioto: Did he go back into business on a private basis after the termination of the contract with the government and the witness answered "no".

Q. Why not, Mr. Nisley? [689]

A. We seriously considered it, and if the United States Vanadium had not stripped the mines of Gateway Alloys, there would have been no problem. We would have had plenty of ore supplied to

do it, but the mines were still under contract to Metal Reserves Company.

The Court: I can't hear you. You will have to speak up.

The Witness: I say, the mines were still under contract to Metal Reserves Company. In view of the things we had been up against, we felt we could not buck anymore and we closed down.

- Q. (By Mr. Alioto): After you closed the plant down, what did you do?
 - A. I went into the service.
 - Q. And you remained how long?
 - A. Until February of 1945 or 1946.
- Q. Do you still own that plant today? Incidentally, what business are you in in Grand Junction?
 - A. I am a real estate broker in Grand Junction.
- Q. Is it part of your work as a real estate broker to cover the area in the Colorado Plateau?
- A. It is. I am licensed under the laws of California and also bonded and licensed in Utah and Wyoming.
- Q. Prior to the time that you made this government contract under which you started operation in the beginning of 1943, I [690] believe you testified you sold all of your oxide, all of your production to the Continental Ore Company except for 10,000 pounds.

 A. That is right.
 - Q. And that 10,000 pounds you sold to V.C.A.?
 - A. That is right.

Q. Do you recall the circumstances under which you sold that 10,000 pounds to V.C.A.?

The Court: Hasn't he just stated that?

Mr. Alioto: No, I am asking if he recalls the circumstances under which he sold the 10,000 pounds to V.C.A., if your Honor please. I won't repeat anything.

A. We had been shipping to Apex Smelting Company, and I believe they had a fire in their plant and were unable to take the product at that time, and so we sold it to the Vanadium Corporation, who met the price that we had been paid by the Apex people.

- Q. The Apex Company was producing ferrovanadium from your oxide for the Continental Ore Company, was it not?
 - A. That is my understanding, yes.
- Q. Who was it who told you to ship your oxide to the Apex Smelting Company throughout this period?
 - A. We had made that arrangement ourselves.
 - Q. You had made that arrangement with whom?
 - A. With Continental Ore Company. [691]
- Q. With Continental Ore Company to ship to Apex? A. That is right.
- Q. Approximately when was it that you sold this 10,000 pounds to the Vanadium Corporation of America?
 - A. I believe it was in February of 1942.
 - Q. In February of 1942? A. Yes.

Q. Did the Vanadium Corporation of America at that time agree to take any more of your oxide?

A. They said they would take all we could produce at \$1.10 a pound.

Q. Do you know whether or not the Vanadium Corporation of America was in touch with Apex Company during that period of time?

A. I don't know.

Mr. Alioto: We will offer at this time, if your Honor please, in connection with the continuity of this testimony about the sale of the 10,000 pounds a series of inter-office memoranda relating to the subject matter from the vice-president of the Vanadium Corporation of America to its president, to its mining engineer, Mr. Gustav Laub, the sales manager, to Mr. E. D. Bransome, of Vanadium Corporation of America; an inter-office memorandum from Mr. Gus Christiansen to Mr. Laub of Vanadium Corporation of America relating to Nisley & Wilson's supplies to the Apex Smelting Company. [692]

Mr. Holland: Your Honor, we object on the same grounds we did when Mr. Burwell was on the stand. This is offered out of order. The witness has stated he does not know anything about the relations between V.C.A. and Apex, and this is a matter between V.C.A. and Apex and should properly come up in Mr. Leir's testimony.

Mr. Alioto: This relates to the issue that the witness is talking about, if your Honor please.

Mr. Holland: I do not think it does.

The Court: Do you know anything about the matter contained in these memoranda?

The Witness: Nothing, your Honor, except we did sell product to the Vanadium Corporation of America at this time.

Mr. Aliote: I want to show, if your Honor please, the reason why the Vanadium Corporation bought this product at the same time. We are talking about the same supply. The letters mention Mr. Nisley.

The Court: I know, but you will have to properly identify this correspondence.

Mr. Alioto: There is no problem of identification. That has been done in pre-trial. It is directly related.

The Court: Very well, let it be admitted.

Mr. Archer: I object-

Mr. Alioto: It is not being offered against you, Mr. Archer, at the moment.

(The document referred to was received in evidence as Plaintiff's Exhibit '62.)

[See Book of Exhibits.]

Mr. Alioto: First is an inter-office memorandum from Mr. Edward S. Christiansen, the vice-president of the Vanadium Corporation of America, to Gustav Laub called Special Report. Mr. Laub is the vice-president also.

Under date of February 20, 1942-

Q. When was it you say you sold this 10,000 pounds to Vanadium Corporation?

A. It was February 21, 1942.

Mr. Alioto: On February 20, 1942, Mr. Laub wrote as follows:

"Mr. Christiansen, Vice-President of the above company, whom I have known slightly for some time, called on me stating that they have decided to go out of the Vanadium business and that they had certain equipment and some small stock of Oxide on hand that they would like to dispose of if we were interested.

"He did not have an actual list of the equipment nor of the raw materials they have on hand but from the figures he had, it looked as though they have close to 50,000 pounds of Vanadium Pentoxide containing between 78/87% V₂O₅ and about 40,000 to 50,000 pounds of Magnesite. [694]

"I told him that we might be interested in the Vanadium Oxide and possibly the Magnesite and some of the equipment which included jaw crushers and miscellaneous equipment. He promised to obtain from their Chicago office an actual complete list of the equipment they have to offer as well as the quantities and grades of Vanadium Oxide and Magnesite and to deliver these to me the early part of next week. I told him that I would then refer this to the proper parties of our company and that we would probably be interested in the Vanadium Oxide and the Magnesite if their prices were right. He stated that they would be reasonable in their prices and did not expect to make a profit.

"Mr. Christiansen further stated that they had been contemplating going out of the Vanadium

business for some time and their definite decision was reached for two reasons. First, that they had a fire in this department of their plant and secondly, that the sales contract which they had with Mr. Leir, President of the Continental Ore Corporation, had not worked out very well. Mr. Leir was getting a fifty percent cut on the profits. Mr. Christiansen also stated that they had some agreements with the Shattuck Chemical Company and Nisley & Smith for deliveries of Vanadium Oxide and that he would also look into this and advise us of the status thereof."

That is G. L. Laub-"GL:ESW".

Then a further report dated March 14, 1942, from the same Mr. Gustav Laub to Mr. E. D. Bransome:

"Subject: Apex Smelting Company, Chicago, Illinois," and up at the top is the pencilled handwriting "Continental Ore Corp."

Mr. Laub writes to Mr. Bransome, the president, as follows:

"Inasmuch as the following information has been conveyed verbally, this memorandum therefore is for our records.

"With reference to the writer's memorandum of February 20th advising that Mr. Christiansen, Vice-President of the above company, had informed us that they were going out of the Vanadium business and had offered us their stocks of Vanadium raw materials, equipment, etc., as I had not heard further from Mr. Christiansen in this regard I had

Larry Johnson casually contact him by phone and tell him that I had not received the information that he promised to send.

"As a result, Mr. Christiansen phoned the writer and stated that in going into the matter further they had run into some legal difficulties. Mr. Leir, President of the Continental Ore Corporation, with whom Apex has an agreement to furnish their entire production [696] of Vanadium, he acting as sales agent, objected strenuously to their breaching their contract and upon referring the matter to their counsel, Apex were advised that Mr. Leir had a strong case against them and to make the most satisfactory arrangement with Mr. Leir that they could.

"This resulted, Mr. Christiansen advised, in Mr. Leir putting a proposition up to them in that they would produce Vanadium at full capacity for a period of three months after which time he would take over their equipment and raw materials contracts and produce the material himself.

"Mr. Christiansen therefore advised that they felt they would be obligated to produce at maximum capacity for a period of three months and had decided to proceed on this basis but that they had not come to a definite conclusion about turning over the equipment and raw materials contracts after that time. The contract with Mr. Leir, he said, extended over the balance of the calendar year.

"In the event that the second part of Mr. Leir's proposition does not go through, Mr. Christiansen

stated that they still proposed to offer us such raw materials as they have available as well as plant equipment. [697]

"The above information, at your suggestion, was conveyed by phone to Mr. E. K. Jenckes, Assistant Chief, Vanadium Branch, War Production Board."

Then there is a memorandum entitled "Special Report," Gustav Laub, April 14, 1942:

"With reference to the writer's previous report of February 20th, Mr. Christiansen of the above company called again yesterday stating that they had now gotten their Vanadium situation straightened out and that they had definitely concluded to dismantle their Vanadium plant at once and go out of the Vanadium business permanently. The equipment from their plant is now for sale. He doubted whether there would be much of the equipment that might interest us but said that the list of same would be sent to us promptly.

"Mr. Christiansen stated that they had finally been able to come to an agreement with Mr. Leir of the Continental Ore Corporation, with whom they had a 14 year contract, to cancel the same. By doing so it was necessary for them, he said, to produce only enough Ferro Vanadium to complete two open orders which Mr. Leir had on his books and to continue producing Vanex (a mixture of Oxide and Aluminum which they have been supplying) up through June, after which time they would be completely out of the Vanadium picture. Mr. Christiansen further stated that their contract

and dealings with Mr. Leir had not proven at all satisfactory to them and that they regretted ever having gone into the business.

"He further stated that he would furnish us with the names of all of their suppliers of Ores and Oxide; the principal ones apparently being Shattuck Chemical Company, and Nisley & Wilson. He appeared to be most anxious that we obtain these raw materials rather than the possibility of Mr. Leir's getting them and continuing in the Vanadium business.

"We had an interesting discussion concerning low copper grained aluminum which they produce and release with necessary priority approval and I therefore turned him over to our Purchasing Department with regard to this item." [699]

One other interoffice memorandum from Mr. Sterling to Mr. Kett, dated April 22, 1942, in which, among other subject matters, he says:

"Apex Smelting Company—It is nice to know that we won't have to worry about them after July 1st."

Q. Mr. Nisley, just final questions now.

On the assumption that the Gateway Mines had not been stripped by U. S. V., as you and Mr. Burwell have testified to, on that assumption, how much vanadium oxide could you have produced from June of 1941 on through to 1949?

A. Well, the mill, as I previously testified, was only—it was limited largely by the amount of roasting equipment — which we could easily have in-

creased, and I see no reason why it couldn't have been a plant capable of producing 800-1,000 pounds of vanadium oxide a day during that period.

Q. And during all of the time that you were in business, was your arrangement with Mr. Leir that he would take your total output?

A. It was.

Q. Were you satisfied with your relations with Mr. Leir? A. Very.

Mr. Alioto: We have no other questions.

Mr. Archer: Did you put that toll agreement in evidence? [700]

Mr. Alioto: No, Mr. Archer, but I have no objection to putting it in.

Mr. Archer: Would you mind?

Mr. Alioto: We had it marked for identification.

Mr. Archer: I believe that's right. Exhibit 74.

Mr. Alioto: 74.

We will offer it into evidence, if your Honor please.

The Court: Admit it.

The Clerk: Plaintiffs' Exhibit 74, heretofore marked for identification, now is admitted and filed into evidence.

(Toll agreement was received in evidence and marked Plaintiffs' Exhibit No. 74.)

[See Book of Exhibits.]

Cross-Examination

Q. (By Mr. Archer): Mr. Nisley, I believe you stated in your testimony that at the time of the

meeting with Mr. Burwell, in October of 1942, it was your understanding that United States Vanadium was paying a ten-cent subsidy to miners, is that what you testified?

A. It was.

- Q. Now, by a ten-cent subsidy, do you mean that they were paying ten cents more per pound to the miners than you were paying?
- A. It was our understanding through correspondence with [701] the War Production Board and Metals Reserve that they were buying this ore for the accounts of Metals Reserve and the Government was picking up the tab on ten cents a pound.
- Q. Well, who was buying, Metals Reserve was buying?
- A. United States Vanadium was buying as agents for Metals Reserve.
- Q. Well, as agents for Metals Reserve, that is. Now, how much were you paying for your ore per pound for two per cent ore, prior to June of 1942?
 - A. Approximately 21 cents a pound.
- Q. And then in June of 1942 or thereabouts, United States Vanadium as agent for Metals Reserve came in and started paying 32 cents or 31 cents a pound for ore, did they not?
- A. Yes. We didn't know, to begin with, that they were agents for Metals Reserve at the time it started.
 - Q. Well, that made you rather disturbed at the

beginning, when you didn't know that they were agents for Metals Reserve, didn't it?

A. It did.

Q. Did you feel any better about it when you found that they were agents for the Government?

A. It was still a problem.

Q. That is true.

The Court: Still what?

A. It was still a problem. [702]

Mr. Archer: Now, then, the contract, this toll agreement which has been put in evidence, was made with United States Vanadium as agents for Metals Reserve, wasn't it?

Mr. Alioto: The contract speaks for itself, Mr. Archer.

Mr. Archer: Well, there is no question about that, is there?

Mr. Alioto: I don't think there is.

Mr. Archer: Well, this is just foundation.

Q. If you want to take a look at it, Mr. Nisley.

A. It was.

Q. And the contract itself stated that you had to deliver the oxide to Metals Reserve, did it not?

A. I believe it stated we were to deliver the oxide to United States Vanadium Corporation as agents for Metals Reserve.

Q. At the Grand Junction warehouse for Metals A. (No response.) Reserve?

Q. That is where it went, didn't it?

A. Well, it was a United States Vanadium warehouse.

- Q. Yes, as agents for Metals Reserve.
- A. That part I don't know. I don't know what—it was the United States Vanadium warehouse.
- Q. Did you know that the disposition of the vanadium oxide you produced was determined by the War Production Board?
 - A. Would you repeat that, please? [703]
- Q. Did you know that the disposition, that is to say, who got the vanadium oxide that you produced under the toll agreement, was determined by the War Production Board?
- A. Yes, we did. In fact, we wrote to Continental Ore, after Mr. Burwell made the suggestion that we enter into the toll agreement, and asked that they received this material through the War Production Board. Previous to that time our material had been allocated to them. They were obtaining allocations on all our material prior to the toll agreement.
- Q. That's right. And so one of your objections to entering into the toll agreement was that your oxide would no longer—might no longer go to the plaintiffs in this action?
- A. Our main concern was that we were losing an independent outlet.
 - Q. That's right.
- A. By the separation of—I mean, by the arrangement of going under the toll agreement. We didn't want to enter into a toll agreement. We would much rather have stayed as an independent operator.

時

Q. Well, that is just what I am getting at. So, prior to the time you entered into the toll agreement, weren't you in touch with the War Production Board, and particularly the Regional Director in Denver, to find out whether or not, if you entered into the toll agreement, the War Production Board would allocate your oxide to the plaintiffs?

A. Yes, we were. At the time Mr. Whitaker made the investigation of the plant, I discussed the matter with him at the end of his visit, and it was our understanding that the recommendation was going to be made that we be allowed to continue receiving ore and that the Metals Reserve would pick up the tab on the difference between the price we were paying and what the Metals Reserve Company was paying. That was the basis upon which we were trying to negotiate the agreement with it.

Q. I am talking now about the allocation. Wasn't it also one of your objectives prior to entering into the toll agreement, to make sure that the War Production Board would allocate your allocation to the plaintiffs, to Continental Ore Company or to Apex Smelting Company?

A. That's right.

Q. And before you signed this toll agreement in February of 1943—dated as of the 26th day of January, 1943—weren't you assured by the War Production Board that your production would be allocated to the plaintiffs?

A. The first material that we produced was al-

located prior to the time we got into operation under the toll agreement.

Q. I am talking about—didn't you get an assurance from the War Production Board that when you started to operate under the toll agreement, your production would still be allocated to the plaintiffs? [705]

A. Yes, to start with I would say that was true.

Q. Under the

A. They didn't assure us that—— Well, the first material was allocated to them, yes.

Q. Under the toll agreement?

A. Under the toll agreement, that's right.

Q. Do you know whether they ever took that material?

A. No, I do not.

Q. Mr. Nisley, didn't you pack that first material in some steel containers which had been furnished you by the Continental Ore Company?

A. That's right, we did.

Q. And in 1944, after the toll agreement had been terminated, wasn't there discussion at that time between yourself and John Hill and Mr. Yetters at the Metals Reserve and the plaintiffs, as to who was going to pay for the steel containers in which this first batch of oxide had been placed and which were still in the Grand Junction warehouse?

A. There was some discussion concerning the drums. I can't relate just what it was.

Q. Well, then, if you put your first production into these steel drums under the toll agreement which commenced in the early part of 1942 and if

the steel drums were still in the warehouse in 1944, your production could hardly have been shipped to the plaintiffs, could it? [706]

- A. That's right.
- Q. Now, I believe you testified, Mr. Nisley, that you had been associated with the Rifle mill, the Loma mill, and the Mesa mill?
 - A. That's right.
- Q. So that in 1941 you were one of the most experienced independent operators on the Plateau, probably next to Shattuck—North Continent and Shattuck, wouldn't you say?
- A. We had considerable experience in the vanadium business.
- Q. So in 1941, when you started your operations, you were making red cake, were you not?
 - A. We were.
 - Q. For Gateway Alloys?
 - A. (Witness nods head.)
- Q. And you at that time, I believe you testified, approached United States Vanadium in order to get an outlet for this red cake, is that correct?
 - A. I didn't testify to that, no.
 - Q. You didn't-or Mr. Brown?
 - A. Mr. Brown made the contact, not myself.
- Q. But at any event, as a result of this contact in 1941 with United States Vanadium, you had an unfortunate experience, didn't you?
 - A. We did.
 - Q. And that discouraged you from selling your

(Testimony of Frank Nisley.)
output to United States Vanadium, didn't it? [707]

- A. It certainly did.
- Q. And made you look elsewhere for an output?
- A. That's correct.
- Q. It certainly gave you no indication that United States Vanadium was trying to capture your output, did it?
- A. Well, Mr. Archer, to answer that, I would have to go into a little background there. At the time they had the Gateway Alloys Mines under lease, they were stripping those mines, they were taking all the available ore from them. It was going to leave us in a position where we wouldn't have an ore supply, other than what we could pick up locally. If they could take our material the same as they did at the Mesa plant, and put us in a position where we couldn't operate, we were out of business, and by taking this material at a much lower—actually amounted to a lower price per pound, if you want to figure it that way—we weren't paid for the material that we took down there, according to our records.
 - Q. That's right.
- A. So it put us in a position where we had to shut down for a period of time.
 - Q. You didn't have an outlet, did you?
 - A. We had to develop another outlet.
 - Q. You had to look for another outlet?
 - A. That's correct. [708]
 - Q. Now, you talk about stripping these mines.

Mr. Brown had leased these mines to United States Vanadium Corporation, hadn't he?

- A. That's right.
- Q. And he had shut down in the spring of 1940 at the time that the export control went in, had he not?

 A. He had.
- Q. During all this period of time the Gateway claims, you are talking about, were actually opened by the Molybdenum Corporation of America, were they not?
- A. It is my understanding that the Gateway Alloys had a purchase contract from the Molybdenum Corporation.
- Q. That's right. And Mr. Brown and Mr. Bowman were required to make payments periodically under that contract? A. Yes.
- Q. So that in 1940, when they shut down their sperations, when the export controls went in, they had no means of making a payment under that contract, did they?

 A. That's right.
- Q. And it was at that time that the United States Vanadium Corporation came in and mined the claims, for about a year, until the time you commenced operation?
- A. It was more than a mining operation. They actually stripped the mines out. They took all the available ore that was in sight, and it wasn't run on a mining—what you would [709] call a mining operation.
 - Q. Well, did they violate the terms of the lease?

- A. I don't know what the terms of the lease were.
- Q. So you don't know whether or not they vio-
- A. We looked at the mines and we objected to Mr. Brown, told him that it looked to us like there wouldn't be any ore available at the time he got them back.
- Q. Now, I believe you testified as to operations, how you could have operated your plant from 1941 to 1949, and of your knowledge of this general area.

At the time you ceased operations, in 1944, had there been any vanadium operations on Beaver Mesa?

- A. It wasn't known as Beaver Mesa at that time. We had been buying ore from the Carnotite Mine, which was located close to the Beaver Mesa Plateau.
- Q. Would you point out how close the Beaver Mesa is to the Gateway mill?
- A. Well, the Beaver Mesa is just to the west of the Gateway mill. It lies pretty nearly on the Colorado-Utah line.

The Court: How far?

- A. Approximately 12 or 14 miles from Gateway.
- Q. (By Mr. Archer): Between 1944 and 1949, do you have any knowledge of how many thousands of tons of vanadium-bearing ore had been taken out of Beaver Mesa? [710]
 - A. Between '44 and '49, no.

- Q. Do you know what independent operators were on Beaver Mesa?
 - A. I went into the service-
 - Q. In '44?
 - A. In '44. I was gone during that time.
- Q. All right. You have testified heretofore as to what your operations would have been from 1941 to 1949. You got back from the service in 1945—what was it, January '45 or December '45?
- A. No, I believe it was about February of '46 when I returned.
- Q. February '46. I think that's right. And then you purchased this mill from Robert Hall?
 - A. At a later date, yes.
- Q. What I am talking about, you testified as to what your operations would have been from this period '41 through '49. So after you returned from the service, were you familiar with these Beaver Mesa operations?
 - A. Yes, to a certain extent I was.
- Q. Who were the operators up there, Mr. Nisley?
- A. Well, it is my recollection at the time that Beaver Mesa wasn't developed yet, '47-'49.
- Q. I believe that's correct. Was it developed prior to '49? [711]
 - A. No, I think it was after that.
 - Q. After '49? A. That's right.
- Q. In regard to your testimony pertaining to the Loma mill which was operated by Mr. Morrison and Mr. Ackerman, you knew at the time that you

were working there, did you not, that Mr. Morrison owned two mines himself in Eastern Utah producing vanadium ore averaging 7 per cent, didn't you?

- A. At the time I went to work for him, he was mining some ores of his own. However, that ore ran out in his own property.
 - Q. Well, he also-pardon me, did you finish?
 - A. Yes.
- Q. He also owned about 60 claims in the same area, didn't he?

 A. Undeveloped claims.
 - Q. And he never did develop them, did he?
 - A. No, he didn't.
- Q. Subsequently, do you recall a lawsuit between Mr. Ackerman and Mr. Morrison over the recovery in that mill?
 - A. I had heard of it, but I was not involved in it.
- Q. Were you involved in any lawsuit in which the Loma mill was also involved?
 - A. No, I can't recall that I was.
- Q. Do you recall a time when Mr. Leir, the plaintiff here, requested you to make a deposition, or to give a statement [712] in regard to the Loma mill, the operations there?

 A. Yes.
- Q. Do you have a copy of the statement you made?
- A. No. As I recall it, it related to the fact that. Mr. Morrison had been late in one of his shipments of his fused material to Mr. Leir and caused some difficulty:
 - Q. At that time didn't you state that Mr. Morri-

son's difficulty—didn't you state that there were several conditions which hindered the production of the oxide and which could not be helped? One was the difficulty in obtaining the equipment which Mr. Morrison needed. Another was the difficulty in getting the equipment which he obtained and which was guaranteed to do the work—guaranteed to do the work to actually producing. Isn't that the statement that you made at that time?

- A. I think that's correct.
- Q. Didn' you also make the statement that "One must remember that the process used by Mr. Morrison was a new one and the equipment had to be fitted in to do the work, and even under the maker's guarantee, some of it had to be changed"?
- A. That's correct. Mr. Morrison had installed a crushing plant that was new to the industry, and he was experiencing considerable trouble with that crushing plant.

It had nothing to do with the chemical recoveries or the process as far as roasting the ore was concerned. [713]

Q. Well, didn't you subsequently hear that the reason Mr. Ackerman, to whom Mr. Morrison sold the mill—that the reason Mr. Ackerman sued Mr. Morrison was because Mr. Morrison had represented recoveries to be about 70 per cent and Mr. Ackerman found out that the recovery was only about 45 per cent.

Mr. Alioto: I submit, if your Honor please, that

a lawsuit in which the witness didn't participate is not relevant cross-examination.

Mr. Archer: I am asking him if he heard.

Mr. Alioto: Even if he did hear, it wouldn't be material, as to what two other people were arguing about.

The Court: Overruled. It goes to his experience.

A. No. [714] In order to explain that a little further, as I previously stated, the chemical recoveries shown in the plant was in excess, I believe, of 70 percent. However, there were certain things that needed to be done there in order to maintain that recovery. For instance, under the leaching tank of Mr. Morrison had been installed concrete sumps, and this material, after it got into the sumps, was leaking out of the tanks and going into the ground, and he was having trouble, as I previously stated also, in crushing this ore. But they were all things that could very easily have been corrected, and in this report I gave to Mr. Morrison I brought these facts out. That is what prompted him to tell me that, that along with the situation that U.S. Vanadium had established in buying ore in direct competition to him in an area where it had not been established prior to that time, made it difficult for him to carry on. He was not financed to fight that sort of situation.

Q. Referring to the period when you commenced operating the Gateway Alloys in 1941, your first year of operation, I believe you testified you

established there favorable relations with a group of independent miners who supplied you with ore.

A. Yes.

Q. So in your first year of operation you had no difficulty in getting ore, is that correct?

A. That is not correct. In the spring, after we installed the equipment, as I previously said, the road [715] conditions in the area were bad. In fact, the roads washed out to both Uravan and to Grand Junction, and so we were isolated at Gateway for a time. Ore could not be moved in. We could not even move supplies to the mills. So it kept us from operating until about the last of May, the first of June, and then we had this experience with the United States Vanadium Corporation that shut us down from July to October in order to establish a new market and put in our fusing plant.

In October, again, when we got started, we were again in a winter cycle and road conditions from October on until February of the next year were pretty—we had a pretty intermittent operation. Some days the miners could delivery ore, some days they could not. So we didn't get as much ore as we could have milled during that period by quite a bit.

Q. What I am getting at is the first date, or the first time, without getting the particular dates, when you experienced difficulty in getting ore outside of due to weather conditions, but to due to the activities of U. S. V. was in June of 1942 when they com-

(Testimony of Frank Nisley.)
menced buying from Metals Reserve, is that correct?

A. No, we had operated prior to that. After the roads cleared up we had a period from about May 20th until the U.S.V. policy had finally taken our miners away from us, during which we did receive considerable ore. In fact, I think during that period we had a supply—during that period we purchased 100, [716] 200, 300—in the neighborhood of 330 tons of ore during that period before we were affected directly by the United States Vanadium ore-purchasing program.

I might say further during that time we had experienced a loss, of course, in the mills during the period we operated the prior year until—that was during the time the United States Vanadium, we made the sale to them—during the following year period the mill showed a profit in the operation, even with these intermittent operations during these winter months.

- Q. What I am getting at is did you ship more oxide prior to the beginning of the Metals Reserve program, or did you ship more oxide after the beginning of the Metals Reserve program, discounting the toll agreement?
- A. You mean to—the material that was produced under the Metals Reserve program?
- Q. I was discounting what you produced under the toll agreement, just considering your own private operations. Did you ship more oxide prior

to the time that Metals Reserve starting buying, or after the time Metals Reserve started buying ore?

- A. It will take a little time to determine that.
- Q. Do you have your record there?
- A. Yes.
- Q. Your first shipment of fused black was on November 13, [717] 1941? A. That is correct.
 - Q. 6,543 pounds? A. That is right.
- Q. Your second was on December 19, 1941, 5,074 pounds? A. That is right.
- Q. And the next shipment was on May 23, 1942, of 2,857 pounds?
- A. You are talking here of the material that we had shipped to Continental and Apex.
- Q. The material that you shipped to Continental and Apex.
- A. During this time, on February 1, 1942, we had shipped 12,000—10,618 pounds of V_2O_5 to the Vanadium Corporation of America.
 - Q. February 21st—that is 12,223 to V.C.A.?
 - A. That was all black, yes.
 - Q. Then in May, 1942, 2,857 pounds?
 - A. That is right.
 - Q. Then on June 20, 1942, 5,040 pounds?
 - A. That is right.
 - Q. June 25, 2,357 pounds?
 - A. That is right.
 - Q. July 31, 6,294 pounds?
 - A. That is right.
 - Q. August 13, 2,470 pounds? [718]
 - A. That is right.

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(Testimony of Frank Nisley.)

- Q. August 29th, 3,964 pounds?
- A. That is right.
- Q. September 21st, 6,040 pounds?
- A. That is right.
- Q. October 21st, 4,458 pounds?
- A. That is right.
- Q. December 1, 4,723 pounds. And then 735 pounds—where did that go? Is that in December?
 - A. I imagine it was.
- Q. It is pretty clear that you continued shipping vanadium oxide to Continental or the Apex Smelting Company, then, after the Metals Reserve program came in, isn't that true?
 - A. Yes, we did.

The Court: We will recess at this time until two o'clock.

(Whereupon a recess was taken until 2:00 o'clock p.m.) [719]

Monday, June 9, 1958-2:00 P.M.

FRANK NISLEY

called as a witness by and on behalf of the plaintiffs; having been previously duly sworn, resumed the stand and testified further as follows:

Cross Examination-(Continued)

Q. (By Mr. Archer): Mr. Nisley, I have here letters in May and June of 1941 from Mr. Leir to you and you to Mr. Leir regarding your commencement of your production for him. I wonder if you

would identify those letters. I notice your letter, it's a little weak—if you would look at the second page there is a more legible copy (handing witness).

A. (Witness examining) Yes, sir.

Mr. Archer: As Defendant's Exhibit next in order I offer a letter from Mr. Leir to Frank Nisley, Jr., dated May 28, 1941, and Mr. Nisley's reply dated June 13, 1941, as one exhibit.

Mr. Alioto: No objection.

The Clerk: Defendant Union's Exhibit 2-J admitted and filed in evidence.

(Letter May 28, 1941, Leir to Nisley; Letter June 13, 1941, Nisley to Leir, received in evidence and marked Defendant Union's Exhibit No. 2-J.) [720]

Mr. Archer: Mr. Leir's letter to Frank Nisley, dated May 28, 1941, reads as follows:

"I have just returned from Chicago and found your kind letter of May 23, for which I think you.

"I saw the Apex people there and had an opportunity to discuss with them, in a general way, the question of the price of vanadic acid.

"We may be willing to give you a price of \$1.00 per pound f.o.b. Grand Junction, provided you ship a good fused acid with at least 85 per cent V₂O₅.

"Apex is prepared to give you such a price in order to cooperate with you in the start of your new enterprise.

"Please let me have your reaction to the above, and don't be too secretive with us, because sooner

(Testimony of Frank Nisley.)
or later you will undoubtedly find us very valuable
customers."

Q. Mr. Nisley, when it states in here "fused acid," that is the same as fused black oxide?

A. That's correct.

Mr. Archer: Mr. Nisley's reply, dated June 13, reads as follows:

"Dear Mr. Leir: I received your letter of the 28th of May and have noted contents carefully.

"I am going to approach the matter in a little [721] way from before. If we can steadily produce an average of 9,000 pounds of fused vanadic acid per month of a grade better than 85 per cent with low impurities, what price would you be in a position to offer? By this statement, I mean that we would be in a position to deliver that amount due to the fact that we have the ore available and are able to make more than that amount per day at the present time.

"We have been able to see your position where no steady flow of the material can be guaranteed over any period of time, but comes in very irregular, and of a lower quality due to the conditions of the ore for treatment, being from different locality. For that reason a lower price seems to have to prevail.

"If you can offer something substantial and it is better than we have at present, we might be interested. We are in a very excellent field for ore and are having very satisfactory results with our processing and milling.

"Let us know your reaction to the above and if you are interested in having a steady supply available, please let us hear from you. I believe we can show you results which have not been obtained elsewhere to our knowledge, and will do our best to cooperate with you in any way we can." [722]

Q. I show you now, Mr. Nisley, a letter to Apex Smelting Company, dated December 23, 1941, signed by you, and ask you whether you can identify that letter (handing witness).

A. (Witness examining) Yes.

Mr. Archer: Offer this as Defendant's Exhibit next in order.

Mr. Alioto: No objection.

The Clerk: Defendant U's Exhibit 2-K admitted and filed in evidence.

· (Letter dated December 23, 1941, Nisley to Apex Smelting Company, received in evidence and marked Defendant Union's Exhibit 2-K.)

Mr. Archer: This is a letter dated December 23, 1941, from Mr. Nisley to Apex Smelting Company, attention Mr. Lippa.

"Dear Sir:

"A few days ago we received notice that vanadium has been put under a priority rating and that we will need, it seems, a priority rating from you in order to fulfill our needs. We wonder if you you would furnish us with such priority rating?

"We shipped to you on the 19th 26 sacks of fused acid and expect to ship again about the first week of January, if not sooner."

Q. I now show you a telegram, Mr. Nisley, to Apex Smelting [723] Company, from you, dated January 27, 1942, and ask you whether you can identify that (handing witness).

A. (Witness examining) Yes.

Mr. Archer: Offer this as Defendants' next in order.

Mr. Alioto: No objection.

The Court: Defendant Union's Exhibit 2-L admitted and filed in evidence.

(Telegram, January 27, 1942, Nisley and Wilson to Apex Smelting Company, received in evidence and marked Defendant Union's Exhibit 2-L.)

Mr. Archer: Telegram dated January 27, 1942, from Nisley and Wilson to Apex Smelting Company:

"Can you receive shipment? We have no further word concerning parties who can receive shipments and we desire to move cakes as quickly as possible."

Q. To what did this telegram refer, Mr. Nisley, if you can recall?

A. It referred to the allocation orders that were required by the government for us to sell our material.

Q. Were you able to get the allocation orders to the Apex Smelting Company?

A. Well, I don't recall whether we were able to get one at that time. Later all the shipments from then on we received those allocation orders. [724]

Q. Well, isn't it a fact that prior to the time you received the allocation order to the Apex Smelting Company you received an allocation to sell to Vanadium Corporation of America and that was the sale that you made to the Vanadium Corporation of America?

A. I don't recall whether we received an allocation prior to that. We contacted them about selling this material to them and they said they could take it, that they had the allocation order.

Q. They had the allocation order and Apex Smelting didn't, isn't that correct?

A. Well, they could obtain it. I don't think that they had it, but that they could obtain it.

Q. Well, they did obtain it before you sold them, didn't they?

A. Yes.

Q. I believe, Mr. Nisley, in your direct examination you testified that at a meeting with Mr. Burwell and Mr. Hill in October of 1942 you were told that Metals Reserve could not buy ore and sell it to you or subsidize a payment to the miners for you and then let you process it and dispose of it as you desired; isn't that the substance of your conversation with Mr. Burwell?

A. Well, Mr. Burwell told us that he wouldn't approve of it. The arrangement that he would approve was one where [725] we would receive the ore from Metals Reserve and return the cake back to them after processing and be paid a toll for the processing.

Q. Who was Orville Whitaker?



- A. He was an independent engineer. He was hired, my understanding was, by Metals Reserve Company to umpire these disputes between mills.
- Q. And he was not an employee of the United States Vanadium-Company, was he?
 - A. Not to my understanding.
- Q. Well, did Mr. Whitaker tell you the same thing that Mr. Burwell told you?
- A. Mr. Whitaker first told me that he would recommend that that be done. At the meeting that was held in Mr. Whitaker's office between Mr. Burwell and Mr. Whitaker, myself and Mr. Gardner, at that time we arrived at the other arrangement. But Mr. Burwell had already suggested that we send this letter to DeWitt Smith, that it was the only thing he would follow through on, and we had no choice but to do that.
- Q. Well, didn't Mr. Whitaker, as well, as Mr. Burwell, tell you that Metals Reserve cannot sell ore to anyone and that Metals Reserve was only able to buy ore and pay the milling cost to get the finished product?
- A. Mr. Whitaker didn't tell us that. In fact, he recommended to the contrary. But at that meeting we had already [726] sent the telegram to Mr. DeWitt Smith and the matter wasn't discussed. It was just assumed that that was the way we were going to proceed, and it is the way we did.
- Q. I show you a telegram dated October 9, 1942, from yourself to Continental Ore Corporation, and

(Testimony of Frank Nisley.) ask you whether you can identify it (handing witness).

A. (Witness examining) Yes.

Mr. Archer: I will offer this as Defendant's Exhibit next in order.

Mr. Alioto: No objection.

The Clerk: Defendant Union's Exhibit 2-M admitted and filed in evidence.

(Telegram October 9, 1942, Nisley and Wilson to Continental Ore received in evidence and marked Defendant Union's Exhibit 2-M.)

Mr. Archer: Telegram dated October 9, 1942 to the Continental Ores Corporation from Frank Nisley, Jr., and Wilson:

"In Conference Whitaker Burwell Denver This Afternoon Was Told By Both Metals Reserve Cannot Sell Ore to Anyone Are Only Able to Buy Ore Pay Milling Costs Get Finished Product In Return Suggest You Contact DeWitt Smith Find Out If Product Will Go to Your Plant We are Told Metals Reserve Washington and WPB Will Decide Where Vanadium Acid Goes Sending Full Information Airmail." [727]

The Court: Who signed the telegram?

Mr. Archer: Mr. Nisley, your Honor.

Q. I show you now a telegram from Nisley and Wilson to Continental Ores Corporation dated October 16, 1942, and ask you whether you can identify that (handing witness).

A. (Witness examining) Yes.

Mr. Alioto: No objection.

Mr. Archer: Offer this as Defendant's Exhibit next in order.

The Clerk: Defendant Union Exhibit 2-N admitted and filed in evidence.

(Telegram October 16, 1942, Nisley and Wilson to Continental Ores received in evidence and marked Defendant Union's Exhibit 2-N.)

Mr. Archer: This is dated October 16, 1942 from Nisley and Wilson to Continental Ores Corporation.

"In Reference Your Letter We Have Been Attempting to Get Our Material Allocated to You. Local Metals Reserve Officials State Entire Problem of Allocation Up to WPB and Metals Reserve, Washington. Our Operating Data Together With Mr. Whitaker's and Mr. Burwell's Recommendations Airmailed to Washington Tuesday October 13. We Will Wire Mr. Hatch and DeWitt Smith Tomorrow Asking Them to Allocate Our Material to You. We Will Do Everything We Can to Help. Letter Being Sent Airmail. We Will Ship About 5,000 Pounds End [728] This Week. Please Call On Us If We Can Help The Situation In Any Way."

- Q. Who was Mr. Hatch, Mr. Nisley?
- A. Franklin Hatch was with the War Production Board in Washington.
 - Q. And Mr. DeWitt Smith?
- A. Was with Metals Reserve Company in Washington.

The Court: Was there any way now that you

could sell this product to the plaintiff Continental Ore without the approval of the Washington authorities?

- A. No, your Honor. The material had to be allocated to them, but they had been receiving those regularly up to that time. Our material had been —we had been able to continue shipping to them.
- Q. (By The Court): Well, if there was any change in the manner of shipping, was that because of orders of the Washington Authority?
- A. The War Production Board, your Honor, had issued these allocation orders on these shipments, correct.
 - Q. And in this case did they issue an order?
- A. I don't know. Our material—we had to deliver our materials to the United States Vanadium. Later on it was out of our hands. Prior to that time we had to have these allocation orders in our hands before we could ship to them, but after we made the toll agreement with United States Vanadium as agents for Metals Reserve, our material was delivered to their warehouse and they took care of the situation from there on.
 - Q. They paid you for the ore?
- A. Yes, your Honor, they paid us a treatment charge for treating the ore.
- Q. (By Mr. Archer): Mr. Nisley, I believe you stated in your direct testimony that the toll agreement was approved sometime in November. In other words, the Metals Reserve approved the principle of having a toll agreement but the final agree-

(Testimony of Frank Nisley.) ment was not executed until the last of January or the first of February in 1943.

- A. That is correct. They approved the substance of it in October or November. I remember that we had—had some provisions in the original toll agreement, and I think the [730] final toll agreement was signed or was stated by the United States Vanadium on January 26 and actually delivered to us about February 3rd or February 4th.
- Q. What I was getting at is, actually a proposed form of toll agreement was sent to you directly from Washington around the end of November, 1942, and you and your attorney went over to see John Hill at the Metals Reserve office and you sat down, all three of you together, went over it and made the changes in it, didn't you?
 - A. That is correct.
- Q. And then it had to go back through the mill again, through the lawyers and back to Washington. Then it came out again, and after you received it, even in the early part of January, you had to make another revision to it right away regarding analysis, and there is a specific indemnity or exculpatory provision. Do you recall that amendment that was added afterwards?

 A. Yes.
- Q. I believe you testified that although this was signed in the early part of February, 1943, you did not get into actual operations until the end of March or the first of April, 1943; is that correct?
 - A. That is correct.

- Q. Prior to getting into operation, you more or less did some fixing up of your plant, did you not?
- A. Well, there were several things. The Metals Reserve or U. S. Vanadium as agents for Metals Reserve, required that we completely clean up all the ore that we had in the plant, that we clean out our fusing furnace, which was quite a task. We had to remove brick, take the vanadium out of it and replace them with new brick. We had to clean out our tanks, process everything we had, and get rid of the material that was ours. So we had a clean plant to start with. It took quite a little time to do that, and also we did install some additional equipment.
- Q. And you obtained a \$5,000 loan from the Reconstruction Finance Corporation, did you not?
 - A. That is correct.
- Q. And that loan was not made until after the toll agreement was approved, was it?
- A. No, we had been dealing with them but they would not talk to us about final arrangements until after the toll agreement had been actually signed.
- Q. After you had cleaned up the plant and put in this, or made these changes or additions in equipment, was your plant in better condition than it had been in the fall of 1942? A. Yes.
- Q. I show you now two telegrams, one dated November 27, 1942, from yourself to Continental Ore, and a reply dated November 28th from Continental Ore to you, and ask you whether [732] you can identify those telegrams. A. Yes.

Mr. Archer: I offer those telegrams as one exhibit, as defendants' exhibit next in order.

Mr. Alioto: No objection.

(The telegrams referred to were thereupon received in evidence as Defendant U's Exhibit 2-0.)

Mr. Archer: The first is dated November 27, 1942, from Mr. Nisley to Continental Ore Company:

"Notice From Telegram Term 'Ground Acid' Material For Shipment Is Crushed As Small In Size As Past Shipment Ore Two. Please Wire Us Immediately If This Size Is Not Acceptable. Otherwise Material Will Be Shipped Tomrrow. Metals Reserve Wired Us Our Contract Passed Final Approval and Placed In Mail November 25. Local Metals Reserve to Commence Supply Ore Immediately Under Terms of Contract."

November 28, 1942, from Continental Ore Company to Nisley and Wilson Vanadium Mill:

"Fused Acid Crushed As Recent Shipments Satisfactory. Please Ship Promptly."

Q. Mr. Nisley, was the Continental Ore Company satisfied with your output, the material which you produced at the Nisley and Wilson mill?

A. Yes. There were some matters coming up at that time. [733] We made fused vanadic acid. As the final step it ran out of the fusing furnace as a liquid, and we caught it in gobs and we had to crush that material, and they were raising the question that the size that we were shipping, the size of the finished cake might be a little large, and we

had only a small crusher and we had shut it down so that it would crush as fine as we could. However, by doing that it cut the capacity of the crusher down. It was quite a task to make it. Some of the other plants at that time had put in what is called a flaking machine, which is merely a way of making this finished product in very fine flakes, and we had not installed such equipment yet because of the cost of it. However, later during our Metals Reserve operation we found a way to do this with a very cheap machine. We actually built one, put it in operation, and started delivering some kind of flake product to the Metals Reserve Company. It is more desirable than the crushed vanadium apparently.

The Court: What was your question?

Mr. Archer: I was just asking him whether this product was acceptable and I think the witness has answered it.

The Court: Very well.

Q. (By Mr. Archer): I now show you a copy of letter from Mr. Leir to Nisley & Wilson dated April 3, 1943, and ask you whether you can identify that.

A. Yes. This refers to the same matter that was under [734] discussion at the time.

Mr. Archer: I offer this letter dated April 3, 1943, from Mr. Leir to Nisley & Wilson as defendants' exhibit next in order.

Mr. Alioto: No objection.

(The letter referred to was thereupon received in evidence as Defendant U's Exhibit 2-P.)

Mr. Archer: Mr. Leir writes a letter to Mr. Nisley dated April 3, 1943, "Re: Vanadium Concentrates."

Q. By "Vanadium Concentrates" we are still referring to the fused black oxide, are we not?

A. That is correct.

Mr. Archer: (Reading.)

"You probably have received a copy of the allocation in our favor for 10,000 lbs of contained metallic vanadium (17,843 lbs. contained V_2O_5) in concentrates which was granted to us by the War Production Board out of your production.

"We presume that you will receive instructions from the Metals Reserve Company through the U. S. Vanadium Corp. to ship your entire production to us to the extent of 10,000 lbs. of V contained and we hope that you will be able to step up your production to reach this figure in the near future because this first [735] allocation will be duplicated regularly from now on.

"We have changed our production somewhat and now need the concentrates in the form of ground materials, maximum 10 mesh and minimum 80 mesh.

"That means that the material should not contain grains above 10 mesh and should not be finer than 80 mesh. It would, of course, be of great help to us if you could grind this material to conform

to these specifications. If you do not have any such grinding equipment at present, please look around and try to obtain this simple machinery at the earliest possible moment. In the meantime, grind the concentrates as finely as possible.

"Of course, for these shipments to us you will use the drums we sent you.

"We are glad that our combined efforts finally were successful in diverting your production to us which will certainly prove to be very important after the present emergency has passed."

Q. I now show you a letter dated May 25, 1943, from yourself to Continental Ore Company, an original, and ask you whether you can identify it.

A. Yes.

Mr. Archer: As defendants' exhibit next in order I offer a letter dated May 25, 1943, from Frank Nisley, Jr., [736] to Continental Ore Company.

Mr. Alioto: No objection.

(The document referred to was thereupon received in evidence as Defendant U's Exhibit 2-Q.)

Mr. Archer: This is from Frank Nisley, Jr., to Continental Ore Company, dated May 25, 1943:

"Dear Sir:

"We are writing you concerning fused acid which we have delivered to the Metals Reserve Company in Grand Junction. Mr. Hill of the M.R.C.—"

Q. "M.R.C." refers to Metals Reserve Company?

A. Metals Reserve Company, yes.

Mr. Archer: (Reading.) "Mr. Hill of the M.R.C.

told us that they were to furnish you with acid from our production and that we could start putting the fused product in your containers as far as he was concerned as per your instructions.

"We have delivered to the M.R.C. warehouse in Grand Junction to date 10,005.5 pounds of fused acid net. 7518.7 pounds of this amount, less samples, has been delivered to them in your drums. We are now fusing out the last 15 days red and have on hand only enough drums to about finish out this run."

What does "red" refer to? Q.

That refers to the red cake. Our fusing plant was [737] much larger than our capacity of output on red cake and we started up and ran out of mash and shut it down.

Q. Mr. Nisley, to get back to the toll agreement, the agreement which is in evidence is dated as of the 26th day of January, 1943. The term of it reads:

"This agreement shall commence on the day when sufficient ore to commence milling operations shall be delivered by the agent to lessees-"

The lessees referred to you?

A. Yes, sir.

"—and shall continue for a period of 90 days from that day or until this agreement is cancelled, but in no event beyond July 28, 1943, unless a subsequent agreement is entered into between the parties."

Was a subsequent agreement entered into?

A. Yes, it was,

- Q. On what date did that terminate?
- A. I don't recall. As I remember it, it ran until we were notified 30 days in advance of cancellation. I don't remember a set date on it.
- Q. You do not remember whether it was subject to cancellation or whether it terminated on the first day of January, 1944?
- A. I am not positive. It could have terminated on January 1st.
- Q. Before going to that, in order to have your agreement [738] extended, do you recall that you had to make a report as to certain of your costs of operation up to date to the Metals Reserve after you had operated a few months?
- A. Yes, we had to make reports to the Metals Reserve monthly.
 - Q. Do you recall Paige Edwards? A. I do.
 - Q. What was Paige Edwards doing at that time?
- A. Paige Edwards was working under, I believe, the direct supervision of Orville Whitaker for Metals Reserve.
- Q. I now hand you a letter dated July 9, 1943, from yourself, signed Frank Nisley, Jr., to Mr. Paige Edwards, to which is attached a copy of a letter dated July 8, 1943, signed by yourself to John Hill, to which is attached a sheet entitled "Cost," and ask you whether you can identify that—a table of costs, I should say.

 A. Yes. [739]
- Q. Do you recall submitting this to Metals Reserve? A. Yes.
 - Q. And it was on the basis of this that your toll

(Testimony of Frank Nisley.)
agreement was extended, is that correct, or subsequent to this your toll agreement——

A. Anyway, the toll agreement was extended, yes.

Mr. Archer: As Defendant's Exhibit next in order, I offer a letter dated July 9, 1943, from Nisley and Wilson to Paige Edwards, together with enclosures.

Mr. Alioto: No objection.

The Clerk: Defendant Union's Exhibit 2-R admitted and filed in evidence.

(Whereupon, letter dated 7/9/43, Nisley to Page Edwards, with enclosures, copy of letter 7/8/43, Nisley to John Hill, and statement of costs, was received in evidence and marked Defendant Union's Exhibit 2-R.)

[See Book of Exhibits.]

Mr. Archer: (Reading):

"Dear Mr. Edwards:

"Enclosed please find copies of letters sent to John Hill regarding continuation of the Toll Agreement. We have asked for an extension of the present arrangement."

First, letter July 8, 1943, from Frank Nisley, Jr., to John Hill:

"Dear Mr. Hill: [740]

"We are submitting a report of our costs per pound of V_2O_3 produced during the month of June which we think is a representative cost of our operation. These costs very clearly compare with the

(Testimony of Frank Nisley.)
costs which we presented to Mr. Burwell and Mr.
Whitaker at the time the Toll Agreement was
drawn up.

"Although we have not been able to reach our capacity due to explanation shown in letter enclosed, we are satisfied to continue under the same terms and conditions as specified in the Toll Agreement dated January 26, 1943, which we are now operating under. We feel that the extension of the Toll Agreement should continue the operation for as long as the Metals Reserve Company is purchasing ores in the Gateway District.

"We would appreciate your immediate attention to this matter."

Then your statement of costs, which you state to be representative, shows costs of 80.52 cents per pound, V₂O₅, do they not, Mr. Nisley? (Handing to witness.)

A. (Witness examining): Yes. At the time we started under the metal reserve operation, of course we had put in some equipment and we found that in addition to the roasting equipment that we had to install another complete set of leaching lines [741] to the tanks, to our leaching equipment. We were being held up in getting out leaching through, and we had to buy pipe and valves and things in order to complete this installation. We had explained to Mr. Burwell and Mr. Whitaker at our meeting in Denver that the more ore we put through the plant—in other words—the larger the capacity, the lower would be our costs on production.

Q. Your costs in June were 80c a pound, approximately, weren't they?

A. Apparently so, from that letter. I think that's correct.

Q. Now, Mr. Nisley, this was just the plant costs and does not include the cost of the ore, does it? Do you want to take a look at it?

A. No, that's correct. That's plant costs, management, profit and so on.

Mr. Alioto: The letter makes reference to an enclosed letter. Do you have it?

Mr. Archer: That would be the next exhibit.

Mr. Alioto: Very well.

Mr. Archer: And now, do you know what recovery you were getting at about this time from your plant, your operation?

A. Well, to explain that, I will have to go back into the method that the Metals Reserve used to determine recoveries. Now the plant itself, our own chemists and our own staff, [742] figured the recovery based upon the head or the ore that we received from Metals Reserve against the tailing that we were taking out at the end, at the end of the process, and the difference representing the material, the vanadium, we were taking out of the ore would be recoverable vanadium. The Metals Reserve Company or, rather, John Hill of the United States Vanadium Corporation had us clean out the plant entirely and start from scratch. And we had to, of course, fill up our ore bins, fill up our roasters, fill up our leaching tanks, fill up our solution tanks.

We had quite a loss in the fusing furnace. This

material, as you melt it, first runs into the brick and fills the brick in your fusing furnace. When that is once filled, then the material begins to flow out of your furnace. That material is tied up all during the time you are operating until you clean it out. So we had quite an inventory there in the plant itself.

As a matter of fact, the first month that we operated they called us in and Mr. Hill said, "We are going to have to shut your plant down because the amount of ore that was delivered to the plant and the amount of fused vanadic acid that you delivered back to us does not jibe. You do not have 70% recovery."

And I showed him that—he knew this himself, being an engineer—that it was impossible for a person to accept ore and deliver back 70% of the material when we had to fill the [743] melt circuit.

He said it didn't make any difference, we had to shut the plant down.

Paige Edwards happened to be there that day, and Paige Edwards was called into the conference, and Paige asked Mr. Hill, he said, "Exactly how did you handle it at Durango?"

And Mr. Hill said, "At Durango we filled the circuit up completely, first, then we started figuring recoveries from that point on."

Mr. Edwards said, "Then why don't you treat these fellows exactly the same way?" And so Mr. Hill then appointed Charles Yetters to go down to the plant and make a check of these inventories that were carried in the plant continuously. And

from there on, these inventories were made.

However, the recoveries that you are talking about, actually when they talk-recovery they were talking fused oxide against the vanadium in the heads to start with.

At the time we closed down, in January or December 31 of '43, actually in January we delivered to Metals Reserve some eight or ten thousand pounds of material that we had tied up in the plant during that period, which added to that recovery. If it would have been counted, the recovery would have been much higher than these figures actually show that they're talking about.

Q. I. don't think these figures show recovery here. I was [744] asking you whether you recalled what your recovery was.

A. Yes, the recovery was running between, as I recall, 70 and 75%, according to our records.

Q. I believe you stated, Mr. Nisley, that your production, according to that sheet, are about 80e per pound V₂O₅, isn't that what that statement shows?

A. Yes, that was about the price Metals Reserve Company was paying us.

Q. Now, when you talk about an 80% or 70%, 75% recovery, what you mean by that — don't you mean that you don't get all the vanadium out of the ore, that you buy the ore for so much a pound, a fertain percentage in it, but it goes through your plant and some of it is lost in the process, in other words?

A. That's correct.

Q. So you get only 75% or 70 to 75%.

Well, now, I believe you testified that prior to June of 1942 you were paying 21c a pound for ore, isn't that correct?

A. That's correct.

- Q. Now, at 70% recovery, that would mean the ore was costing you really 31c, wouldn't it?
 - A. Approximately.
- Q. So your costs on 21c ore—this is 21c ore—we have to divide it by seven-tenths because we only have about 70% recovery. So your costs on that basis were about \$1.11 a pound, isn't that correct?
 - A. Well, what period are you talking about?
- Q. I'm talking about—I am just saying, assuming you got ore—this is your 80c figure in June of 1943, and assuming that you were operating independently and paying 21c for ore, your costs would have been \$1.11, wouldn't they?
- A. You are trying to get two things entirely different. If you assume what you are talking about, that is correct.
- Q. That is what I say, you are operating under a toll agreement, it didn't make any difference to you what the ore cost, did it, because Metals Reserve was buying it and you were processing it and they would take the output. So the only figure we have then is the 80c figure from actual operation. These prices here are assumed prices.
 - A. That's correct.
- Q. That's right. But assuming that price for ore, your output would have cost \$1.11 a pound.

Now, assuming that your production costs stayed the same, you will recall that when the toll agree-

ment was terminated the price of ore had gone up to 31e, had it not?

- A. At the time our toll agreement was cancelled, Metals Reserve Company was still buying the ore.
- Q. And you said that they were paying a 10c subsidy, did you not?
- A. They were paying different miners different prices.
 - Q. I thought you said a 10c subsidy. [746]
- A. Originally that was true, but subsequent to that they made different deals with different miners, and they paid each miner different prices.
 - Q. Was it above 21c?
- A. Well, asn't familiar with that because we weren't buy ore at that time.
- Q. Well, let me put it this way: Could you have paid 31c for ore and sold your oxide at the ceiling price of \$1.10, assuming your production costs at 80c a pound?
- A. Well, this 80c figure you're talking about, Mr. Archer, was made in June at the very onset of our operation under the toll agreement. Later, our plant was producing a good deal more vanadium and our costs were considerably reduced in the later operation over what it was the first few months.
- Q. But at the 80c costs, you could not buy ore at 31c and sell in a market at which the ceiling price was \$1.10, could you?
- A. I think we could. It would have reduced our profit. You must remember that the 80c contained the profit that we were making at the time. So it

would only have been a matter of one cent—yes, we could have operated.

- Q. You mean at the 21c figure or the 31c?
- A. The 31c figure.
- Q. Well, what would have been your costs if you had been buying ore at 31c with the 70% recovery, what would that give you? That would give you about 44c ore cost, wouldn't it? [747]
- A. Well, if the recovery stayed at 70%, that would be true.
- Q. Well, you want to make it 80%? It's going to be about 3.9—39c, isn't it? So 39c ore cost with the production costs of 80c, you're \$1.19, aren't you?
 - A. That's correct.
- Q. Well, as a matter of fact, the difficulty out on the Colorado Plateau was that the ceiling price for vanadium oxide under contract sales had been set at \$1.10 since 1939 and wasn't increased until well after the war, while the price of ore went way beyond the 1939 level?
- A. I don't believe that is correct, Mr. Archer. To my knowledge, the ceiling price of vanadium wasn't set at \$1.10. That was the established market price.
- Q. Oh, you think you could have sold—after price controls went in, you think you could have sold vanadium oxide at over \$1.10 on a contract basis to Mr. Leir?
- A. After the ceiling prices went in, of course that would be set at \$1.10.
 - Q. That is what I mean.

- A. That wasn't true in 1939.
- Q. That's right. It had, of course, in 1939—the market price, that is what I'm getting at—the market price was \$1.10, or whatever it was in '39, but, in any event, starting with at least by the time you started operating at Gateway, soon after that price controls went in and the price was set at \$1.10 for oxide, and that continued throughout the war. [748]

Meanwhile, in '42 the price of ore jumped 40c a pound, isn't that correct?

- A. Metals Reserve Company—the United States Vanadium people were buying the ore at the increased price, that is true.
- Q. Metals Reserve Company or United States Vanadium?
 - A. United States Vanadium Corporation.
 - Q. As agent for Metals Reserve?
 - A. For Metals Reserve.
- Q. I now show you letter referred to in the last exhibit, being letter dated July 8, 1943, from Frank Nisley, Jr., to John Hill, and ask you whether you can identify that. (Handing to witness.)
- A. (Witness examining): I certainly can. This refers to situations we were having in the mill. It enters into this picture here a little bit. I would like to say that these costs that we were—that were being shown here—we enlarged the plant, we of course had to hire a few more men; we decided we needed housing for those men, and that is what this letter refers to, the fact that we had applied to the

Government for housing which they were building at Naturita and Uravan.

And some of these costs that are reflected in this picture come out of that. We, for instance, just for an example, the war housing people said that they would put in housing for us if we would furnish water supply and do certain things that they required, and those things were done and those things are [749] reflected in this cost here, again, which after they were once done our costs would be dropped back down. [749-A]

We actually put in an order for that housing.

Q. Isn't that typical though of an operation out on the field and what you have to do?

A. That is typical, but that cost does not continue after you get your housing. Then you are set and your costs drop down. It is an additional cost that has to be reflected in your costs at the time it is put in.

Mr. Archer: As Defendant's Exhibit next in order I offer a letter dated July 8th, 1943, from Frank Nisley, Jr., to John Hill.

Mr. Alioto: No objection.

(Letter July 8, 1943, Nisley to Hill, was thereupon received in evidence and marked Defendant Union's Exhibit 2-S.)

Mr. Archer: This is dated July 8th, 1943. This is a part of the last group of letters which I read from Frank Nisley to John Hill:

(Reading)

"Dear Mr. Hill: On November 25th, 1942 we received a telegram that the Toll Agreement had been approved. We realized at that time that we must have some housing facilities in order to operate at a twenty ton capacity. We immediately applied for houses through the National Housing program.

"During the past three months we have not been [750] able to hold a full crew at the mill due to the housing situation. Because we have not been able to keep a full crew, we have been unable to get our tonnage near the twenty ton daily capacity which is our mill capacity. Although we have reached the twenty ton mark some days we were not able to hold it at that figure due to lack of labor. Many men applying for work would not stay here because of the fact that there are no available houses or places to stay.

"We have just received the following letter from Mr. Picton of the National Housing Agency:

"'Mr. Harry C. Gardner

St. Regis Hotel

Grand Junction, Colorado

'Dear Mr. Gardner:'"

Q. Who was Mr. Harry C. Gardner?

A. Mr. Gardner had taken over the assets or the plant at Gateway and he was—we might consider him a partner in this operation.

Q. A partner of yours?

A. Yes. He owned the plant and our contract, our lease contract was from him.

Mr. Archer: (Resuming reading)

"'We have just received notice from Washington that new public construction for 23 families [751] and 6 single persons has been approved for Gateway, Colorado.

'Sincerely yours,

'John M. Picton

'Senior Housing Representative.'

"This program will take care of our labor situation. As soon as we can obtain a full crew with housing facilities for them and their families, we can reach the mill capacity without trouble."

- Q. Now, Mr. Nisley, you were in the courtroom the other day, were you not, when Mr. Burwell testified? A. I was,
- Q. You were here for most of his testimony, weren't you?

 A. Yes:
- Q. And I believe you already testified that you were supplying your vanadium oxide to the Apex Smelting Company, which was making ferro-vanadium out of it, is that correct?
 - A. That is correct.
- Q. Did you hear Mr. Burwell testify that in calculating the costs of ferro-vanadium, because there are two pounds of oxide that go into each pound of ferro-vanadium, you more or less double the oxide cost and add a process cost of around 50 cents, what he called his kitchen arithmetic?
 - A. I heard that.
- Q. Let us take out your 21-cent ore price figure, 20 per [752] cent recovery, and your June costs of 80 cents. If you double your oxide cost you come to

\$2.22, which is, the first part of it being kitchen arithmetic, and a 50-cent cost for conversion to ferro-vanadium, gives you \$2.72 cost, does it not?

- A. That is correct.
- Q. Do you recall that Mr. Burwell testified that in his opinion the price of ferro-vanadium should have been reduced from the \$2.70, \$2.80 and \$2.90 to \$2.25? A. Yes.
- Q. If the price of ferro-vanadium had been \$2.25, so that the persons to whom you were selling it would have had a \$2.25 market, could they have bought your oxide at \$1.11 and operated at a profit, assuming Mr. Burwell's assumptions?
- A. I believe Mr. Burwell also testified that the cost of the vanadium produced at other plants—not Gateway but Durango, was also above \$1.10 a pound to Metals Reserve Company?
 - Q. You are exactly right.
- A. So I can see no difference between our operation and that of Durango, Uravan or any place else.
- Q. You are exactly right, so you could not buy at that price and sell and meet a market price of \$2.25, could you?

Mr. Alioto: That is argumentative, if your Honor please, with a witness who is not in the ferro-vanadium business. It assumes a 50-cent cost of doing business. [753]

The Court: I think it is a proper question. Overruled.

A. Mr. Archer, from a practical standpoint, Metals Reserve Company was not selling it to these

concerns at \$2.20 a pound or — you said a minute ago the selling price was \$1.10 as far as Metals Reserve Company was concerned.

- Q. That is correct.
- A. So that anybody to whom the material was allocated during that period would pay the \$1.10, isn't that right?
 - Q. That is correct.
- A. So I don't see where it has any bearing on this question.
- Q. What I am getting at is: Assuming that your suppliers, if you were operating in a private market, selling at \$1.11—
- A. They couldn't obtain the material except through the War Production Board and the Metals Reserve Company. They had to buy it through them. We couldn't sell it to them, even prior to this, unless the War Production Board allowed us to do so.
- Q. You couldn't sell it unless the War Production Board allocated it after December 1, 1941, could you?
 - A. I don't remember just when they——
 - Q. That was the telegram I just showed you.
 - A. Whatever that time was, that is true.
- Q. My point is, though, assuming the market price of [754] the ferro-vanadium had been at Mr. Burwell's figure of \$2.25, and assuming Mr. Burwell's kitchen arithmetic is correct, could a person have bought your product at either the \$1.10 or

\$1.11 figure there on the board and manufactured and sold ferro-vanadium at \$2.25?

Mr. Alioto: Your Honor, this witness is not in the ferro-vanadium field. He is not competent to answer that.

The Court: Overruled. If you have an opinion I think you can so state.

The Witness: My opinion is, your Honor, if you can't buy the material from any source other than the Metals Reserve Company and the War Production Board, and the price was \$1.10 a pound, it is irrelevant. It doesn't make any difference what these costs are here. If I was in the market buying it, I could buy it at \$1.10 a pound, regardless of what the cost was at the time.

- Q. (By Mr. Archer): What you are really saying, is it not, Mr. Nisley, is that during this period there just was not a free market because of the governmental controls?

 A. That is true.
- Q. (By the Court): About how much time did that cover? From 1941 to 1944?

Mr. Archer: I think Mr. Nisley has testified that he finished on December 31st, 1943.

- Q. (By the Court): During that period of time, then, [755] there wasn't what you would call a free market?
- A. Your Honor, we were producing after Metals Reserve Company started purchasing ore. However, our ore supply is tied only to the Gateway Alloy Company that owned these mines, and we were sell-

ing our product at that time to the Continental Ore Company.

Q. What I am getting at is, there could not be a sale of this material during this war period except with the consent of the War Production Board or the governmental agencies?

A. That is true, your Honor. The War Production Board had to allocate that material to some purchase.

Mr. Archer: Does your Honor want to take a recess?

The Court: Yes. We will take a ten-minute recess.

(Recess.) [756]

Mr. Archer: Your Honor, I wanted to read one paragraph from the original amendment to the toll agreement which was signed by Mr. Van Fleet as Vice-President, United States Vanadium Corporation, as agent for Metals Reserve Company, Frank Nisley and Hays C. Wilson, a partnership, doing business as Nisley and Wilson, by Mr. Nisley and Hays C. Wilson. Article 16—an additional Article 16 was added, as follows:

"In making this agreement, United States Vanadium Corporation is acting solely in its capacity as agent for Metals Reserve Company and no liability or responsibility shall attach to United States Vanadium Corporation in its individual capacity by reason of executing this agreement, or by reason of any matter or thing arising hereunder."

Q. Now, Mr. Nisley, I have here a copy of the

supplemental agreement which was entered into as of July 6, 1943, signed by Mr. Wilson and again by Mr. Van Fleet, and ask you to identify that (handing witness).

A. (Witness examining): That is the supplemental agreement.

Mr. Archer: Offer the agreement dated July 6, 1943, supplemental agreement, as Defendant's Exhibit next in order.

Mr. Alioto: No objection.

The Clerk: Defendant Union's Exhibit 2-T admitted and filed in evidence. [757]

(Supplemental agreement July 6, 1943, received in evidence and marked Defendant Union's Exhibit 2-T.)

Mr. Archer: Paragraph I states:

"Extension of term. Subject to the condition that on or before July 28, 1943, lessee shall submit to agent written evidence satisfactory to agent's counsel that H. I. Gardner has, prior to July 28, 1943, exercised his option to purchase the mill site occupied by the Gateway plant referred to in said toll agreement, and has thereby or otherwise acquired valid, legal and equitable title to said mill site, the term of said toll agreement is hereby extended from July 1, 1943 to 12:00 o'clock noon, January 1, 1944."

- Q. Now, Mr. Gardner did exercise his option to purchase the mill site? A. He did.
- Q. And it was extended to January 1, 1944, pursuant to this agreement? A. That's correct.
 - Q. I show you now a letter dated December 13,

1943, from yourself to Mr. Leir (handing witness) and ask you whether you can identify it.

A. (Witness examining): That is a letter we wrote to Mr. Leir. [758]

Mr. Archer: Offer as Defendant's Exhibit next in order letter dated December 13, 1943 from Frank Nisley, Jr., to Henry Leir,

Mr. Alioto: We have no objection.

The Clerk: Defendant Union's Exhibit 2-U admitted and filed into evidence.

(Letter dated December 13, 1943, from Frank Nisley, Jr. to Henry Leir, received in evidence and marked Defendant Union's Exhibit 2-U.) [See Book of Exhibits.]

Q. (By Mr. Archer): This was just prior to the end of the toll agreement, was it not?

A. That's correct.

Mr. Archer: (Reading)

"Dear Mr. Leir:

"We have been informed by the United States Vanadium Corporation, as agents for Metals Reserve Company, that the present contract with them will not be renewed after the expiration date of January 1, 1944. The M.R.C."——

that refers to Metals Reserve Company, doesn't it?

A. That's right.

0

Mr. Archer: (Reading)

"The M.R.C. have about 3500 tons of raw ore stockpiled at our plant. We do not know yet what will be done with it. The trend in this section is for Metals

[759] Reserve Company to relinquish ore-buying contracts and drop out of the ore-buying business. Control of production is to be returned to individual companies. The most serious problem which will arise out of the change of control, as far as the production of vanadium is concerned, is the buying of vanadium inventories. The M.R.C. have raised the price of ore to such a high level that it will make the cost of the finished product 20 cents over the old price of \$1.10. It will not be possible, at the present time, at least, to buy the crude ore at the prices existing before the M.R.C. began buying ore. The M.R.C. raised the raw ore price from the old level of 21 cents to 31 cents per pound of contained V₂O₅. The hauling price was also raised on the ore. The raises will amount to about 20 cents per pound of recovered vanadium pentoxide. This raise can be readjusted in time, but at present labor is scarce and also costs more per ton of ore produced. The raise in ore price is the only serious problem which we see in the way of production.

"We would appreciate any information which you may be able to give us concerning a market for the vanadium after the first of the year, and also the price. We would like to formulate plans as soon [760] as possible for the change in operation.

"We appreciate very much your past cooperation and sincerely hope that plans can be made for an operation which will be of mutual benefit."

Q. Now, in December of 1943 you did not have

in your plant at Gateway an acid-leaching process for producing uranium oxide, did you?

- A. No, we didn't. Well—let me modify that a little bit. In our process we used a mild leach. We didn't use as strong an acid leach as you're probably referring to there, in other words, one that would completely take out the uranium that was in the ore.
- Q. Well, your plant wasn't equipped to produce uranium oxide, was it?
- A. Only in what we recovered in sludge, that is correct.
- Q. Those are the sludges, I believe, which Mr. Burwell testified were processed at Durango for the Army?
- A. No, we made a small concentration of sludge but we didn't do it on the scale—
 - Q. Didn't those sludges belong to M.R.C.?
 - A. They did.
- Q. And didn't M.R.C. ship those down to Durango for processing at the Army plant?
- A. I presume that those were picked up with the tailings. We drained the sludges out in the tailing pile, keeping them [761] separate from the regular tailings.
- Q. Didn't Mr. Leir suggest to you at this time that you put in the machinery for a process which was necessary for processing uranium oxide?
- A. I believe he did. I know we did investigate the possibility of doing that. We, in fact, were given permission to look through the plant at Uravan, and we later made a study of that through a company

at Salt Lake City as to what it would take to put that sort of a thing in. But in talking with Mr. Burwell he told us that since we were under this toll agreement that that—he was at that time running the Army research program, the Army research program—

- Q. You mean the Manhattan Project?
- A. It was part of the Manhattan Project, yes. He told us that since the material belonged to the Metals Reserve Company and that our toll agreement was going to be up right away, that it wouldn't be feasible for us to put that in, for those tailings.
- Q. I now show you a telegram dated April 4, 1944, from yourself to Continental Ore Company, and ask you whether you can identify it (handing witness).
- A. (Witness examining): I believe that is a copy of a wire that we sent to Continental Ore Company.

Mr. Archer: As Defendant's Exhibit next in order, I offer the telegram dated April 4, 1944, from Frank Nisley, Jr., [762] to Continental Ore Company.

Mr. Alioto: No objection.

The Clerk: Defendant Union's Exhibit 2-V admitted and filed into evidence.

(Telegram April 4, 1944, Nisley to Continental Ore Company received in evidence and marked Defendant Union's Exhibit 2-V.)

Q. (By Mr. Archer): This was after the termination of the toll agreement and just actually prior to the time you went in the Navy?

A. I believe that's correct.

Mr. Archer: (Reading)

Telegram from Frank Nisley, Jr., to H. J. Leir, Continental Ore Company:

"Refer Our Letter March 24 Concerning Outlet For 300,000 Pounds Vanadium at Rate 600 Pounds Per Day. If You Cannot Handle Above Amount at Present, Please Wire Us Amount You Could Handle."

Q. I now show you, Mr. Nisley, Mr. Leir's reply dated April 4, 1944, to you, and ask you whether you can identify that (handing witness).

A. (Witness examining): Yes.

Mr. Archer: Offer as Defendant's Exhibit next in order telegram from Continental Ore Company to Frank Nisley, Jr., dated April 4, 1944. [763]

The Clerk: Defendant Union's Exhibit 2-W admitted and filed into evidence.

(Telegram April 4, 1944, Continental Ore Company to Frank Nisley, Jr., received in evidence and marked Defendant Union's Exhibit 2-W.)

Mr. Archer: (Reading) Mr. Frank Nisley, Jr. "Re Tel. Will Give You All Possible Cooperation and Wire You in Few Days What Monthly Quantities Can Take From You. Incidentally Since Future Operations Will Be Under New Name, Sug-

(Testimony of Frank Nisley.)

'gest you Settle Old Account Mr. Pleasants. Regards."

Q. What did the "* * * old account Mr. Pleasants" refer to?

A. We had been trying to negotiate for the purchase of the stockpile at Gateway and we had hired Mr. Pleasants to represent us in Washington in these negotiations.

Q. You mean he was negotiating with M.R.C.?

A. He had been negotiating, I believe, with M.R.C., and also in regards to—we were also—. This goes back quite a little way. We had started in, at the time the toll agreement was to expire, we were objecting to the fact that they were shutting our plant down without shutting the other plants down, which they told us they intended to do. I believe you read Mr. Hill's—some correspondence from him a short time ago in which he had told us that all the plants would be shut down, that the mining contracts would be relinquished and we [764] would be allowed to go back into an independent situation again.

Well, that wasn't earried out that way. We were shut down but the other plants were not shut down; they were still operating and they were still buying ore in the area. So we were sitting there with a plant without—we couldn't buy ore from other sources. We had been contesting that, also.

Q. And you sent Mr. Pleasants to Washington to see Mr. Hatch of the War Production Board, and to see Senator Johnson, isn't that correct?

gw.

(Testimony of Frank Nisley.)

- A. I think that's correct. [764-A]
- Q. So he had been unsuccessful?
- A. That is correct.
- Q. I now show you a copy of a letter dated April 14, 1944, from Henry J. Leir to yourself and ask you whether you can identify that.

The Court: Did you read the last exhibit?

Mr. Archer: I guess I did. That was Mr. Leir's reply to this. I will read it again while Mr. Nisley is looking at that. This is Exhibit U - 2-W

(The exhibit was re-read.)

The Witness: I believe that is a copy of the letter.

Mr. Archer: These came from Mr. Leir's files, so I don't have the originals.

Mr. Alioto: No objection.

Mr. Archer: As defendants' exhibit next in order I offer a letter dated April 14, 1944, from Henry J. Leir to Frank Nisley, Jr.

(The letter referred to was thereupon received in evidence as Defendant U's Exhibit 2-X.)

Mr. Archer: (Reading.)

"Dear Mr. Nisley: Re: Vanadium.

"We wish to refer to your letter of March 24th and your wire of April 4th regarding resumption of your operations." [765]

- Q. That is the April 4th telegram regarding 300,000 pounds of vanadium, is that correct?
 - A. I believe that is correct.

Mr. Archer: "While we cannot give you a definite answer today, we hope to do so sometime next week when we will wire you.

Very truly yours,

Continental Ore Company."

Q. I now show you a letter dated May 15, 1944, from yourself to Henry John Leir and ask you whether you can identify that.

A. Yes.

Mr. Alioto: We have no objection.

Mr. Archer: As Defendants' exhibit next in order I offer a letter dated May 15, 1944, from Frank Nisley to Mr. Henry John Leir.

(The letter referred to was then received in evidence and marked Defendant U's Exhibit 2-Y.)

[See Book of Exhibits.]

Mr. Archer: (Reading) "Dear Mr. Leir:

"Since I have been called to service in the Navy and leave day after tomorrow, I thought it best to write you a note regarding the status of the mill."

Mr. Alioto: What is the date on that?

Mr. Archer: May 15, 1944. This is following the telegram. [766]

"For the time being Mr. Wilson, Mr. Gardner and myself have decided to leave the mill intact pending future developments. Mr. Wilson intends to go to other work. Mr. Gardner therefore will look after the plant."

Q. He is the one you referred to as being a sort of partner?A. That is right.

Mr. Archer: "Should anything of interest develop, I would suggest that you contact Mr. Gardner at Glenwood Springs. As you know, Mr. Gardner is doing other work and has kept the chemist, who was with us since the mill started and who is familiar with the plant operation, with him. The plant could be operated again should the occasion demand on fairly short notice.

"There is one other matter which should be straightened out. As you know, we had some drums on hand which belong to you. At the time we started production under the M.R.C. program, you will remember that you had an order for our production through the M.R.C. We wrote you concerning the matter and your Company wrote us that we could use the drums to ship the material in. Later, however, the program was changed. However, our material was stored in your drums. Since you did not take the material, the drums were stored in the warehouse in Grand Junction. A few days ago [767] the M.R.C. shipped the material from Grand Junction. I informed Mr. Hill again that the drums were your property. He asked me that we find out the price on the drums and they would pay for them if it would be all right instead of returning them as the cake is to be stored and, therefore, will not be removed from them except by special demand."

The rest concerns the disposition of those terms.

Q. Now, I show you a letter from Mr. Gardner dated July 12, 1944, in longhand. Attached to it is

a copy which may be more legible. Maybe you can read it. It is longhand. Are you familiar with it?

A. That is, I believe, Mr. Gardner's signature, yes.

Mr. Alioto: We have no objection.

Mr. Archer: As defendants' exhibit next in order I offer a letter dated July 12, 1944, from Mr. Gardner to Continental Ore.

(Whereupon the letter referred to was received in evidence as Defendant U's Exhibit 2-Z.)

Mr. Archer: (Reading) "Continental Ore Company.

"Dear Sirs:

"I have been unable to get anyone interested in starting the mill at Gateway. Will lease mill for 3c per pound produced, if you can find anyone interested. It could be put in operation in 30 days. It could [768] produce about 15,000 pounds per month."

The Court: At the time this letter was written, was Mr. Gardner the owner of the mill?

The Witness: He was, your Honor. He was the owner of the old equipment. Mr. Wilson and myself owned the equipment we had installed there, which was still in the plant.

Mr. Archer: As defendants' exhibit next in order I offer a letter from Mr. Wolf of the Continental Ore Company to Mr. Gardner replying to the letter dated July 24, 1944.

Mr. Alioto: No objection.

(The document referred to was received in evidence as Defendant U's Exhibit 3-A.)

Mr. Archer: (Reading) "Mr. H. I. Gardner, July 24, 1944.

"Re: Vanadium Mill at Gateway.

"Dear Mr. Gardner:

"We have your letter of July 12th advising that you have been unable to get anyone interested in resuming mill operations at Gateway and that you would be ready to lease the mill at a price of 3c per pound produced. Of course, it is difficult for us to do anything from New York regarding the resumption of operations, but we will keep it in mind should an opportunity present itself. Please do the same at your end, because we feel it is a pity to let the mill [769] stand idle. In any case, we can use the material and would like to see the mill reopened at an early date."

Q. I now show you a letter dated July 14, 1944, from Nisley & Wilson, Vanadium Mill, to Continental Ore Company. It is signed by Mr. Wilson, apparently by Mrs. Wilson.

A. That is apparently a letter signed by Mr. Wilson.

Mr. Archer: As defendants' exhibit next in order I offer a letter dated July 14, 1944, from Nisley & Wilson to Continental Ore.

Mr. Alioto: Do you have the letters referred to

(Testimony of Frank Nisley.) therein, July 5th and the telegram? Were they attached, Mr. Archer?

Mr. Archer: I think they are in evidence. I don't have them here at any rate.

Mr. Alioto: No, it says, "Telegram regarding the possible time required to open the Gateway mill under a regular contract."

Mr. Archer: These are, of course, from your files so I don't know what you are referring to.

The Court: Go ahead.

(Whereupon the letter referred to was received in evidence as Defendant U's Exhibit 3-B.)

Mr. Archer: Maybe it wasn't in the file. These are from Mr. Leir's files, July 14, 1944, Nisley & Wilson to Continental Ore Company, re: Vanadium Mill, H. I. Gardner, [770]

"Dear Mr. Wolf:

"I have today written Mr. H. I. Gardner asking him to give you a letter of July 5th and a telegram of an earlier date regarding the possible time required to reopen the Gateway Mill under a regular contract and to give this as early as possible attention. I am away from Gateway at present, but can be contacted at Grand Junction in care of the Virginia Hotel or at my home address at Rifle, Colorado. I will be very glad to cooperate with you in any transaction which might lead to the re-opening of the Gateway mill immediately or in the near future.

"The Metals Reserve stockpile is untouched as yet, and a considerable number of miners are still in the district awaiting a place to sell the mill ore. If you should see any possible way for us to operate, for new parties to take over our lease or any other arrangement, I would be more than glad to hear from you or Mr. Leir on the subject."

The Court: Signed by whom?

Mr. Archer: Signed by A. C. Wilson, who is Mr. Nisley's partner.

- Q. As the last exhibit, Mr. Nisley, I show you a longhand letter from yourself to Mr. Leir from down at the Navy Material School and I have attached to it a typewritten copy. It may [771] be a little faster to read than the other, and I ask you if you can identify that.

 A. Yes.
- Q. While Mr. Alioto is looking at that, Mr. Nisley, do you know whether the Continental Ore Company ever contracted for the 300,000 pounds annual production of the Nisley & Wilson mill in 1944?
- A. I don't presume they did. What we refer to, we estimated that the stockpile at Gateway contained approximately that much V_2O_5 .

The Court: If you could have bought the stockpile at a reasonable rate and had a purchaser for the output, would you have re-opened the mill?

The Witness: Your Honor, there were more things involved than that. In the first place, this matter of uranium was involved, and we knew that we would have to go into uranium production in

order to be successful in producing that ore. In fact, one of the reasons they gave for shutting our plant down at first was because we didn't have a uranium reduction plant at the time at Gateway. So, it is hard to say, in view of other things that affected that.

Mr. Archer: As defendants' exhibit next in order, I offer Mr. Nisley's letter to Mr. Leir.

(The letter referred to was then received in evidence and marked Defendant U's Exhibit 3-C.) [772]

[See Book of Exhibits.]

Mr. Archer: (Reading.)

"Frank Nisley, Jr., to Mr. Leir, from the United States Navy Electrical Engineering and Radio Materiel, University of Houston, Houston, Texas."

Q. Is that right?

A. Electronics Engineering.

Mr. Archer: I was in R.T., too.

"Frank Nisley, Jr., to Mr. Leir, October 8, 1944.

"Last week Mr. Wilson wrote me regarding the Gateway plant. As you may know, Mr. Gardner isn't interested in operating it himself. He is interested in contracting and that keeps him busy."

Q. Mr. Nisley, did that refer to the fact that the government withdrew from location some one million acres of potential vanadium and uraniumbearing ore land in the Colorado Plateau?

A. I presume it did.

Mr. Archer: I have no further questions. [773]

Cross Examination

- Q. (By Mr. Holland): Mr. Nisley, you had very little contact with Vanadium Corporation in connection with your operations in the Nisley and Wilson mill, is that correct?
- A. That's correct. About the only contact we had with the Vanadium Corporation was at the time we sold a few stockpiles to them.
- Q. As a matter of fact, the Vanadium Corporation rather did you a favor on that occasion, didn't they?
- A. No—at least it got rid of our material. We sold it.
- Q. I mean, you had received word from Apex Smelting not to ship any material until further notice, isn't that correct! A. That's right.
 - Q. And you had this material on hand?
 - A. That's correct.
- Q. And you had also borrowed some money against it in order to operate, hadn't you?
- A. Yes, we were borrowing from the bank against it.
- Q. And you approached Vanadium Corporation and asked them to take it off your hands so that you could square-up with the banks, isn't that correct?

 A. That's correct.
- Q. And as far as you are concerned, your relations with Vanadium Corporation were very satisfactory, isn't that correct? [774]
 - A. As far as the sales were concerned, it was.

- Q. You had no other relations with them, isn't that correct?
 - A. That's about the only relationship.

Mr. Holland: That is all.

Redirect Examination

- Q. (By Mr. Alioto): Mr. Nisley, at the time that you negotiated with the Vanadium Corporation of America in connection with this 10,000 pounds of material, did they inform you that they were meeting with the Vice-President of the Apex A. 'No, sir. Smelting Company?
- Q. Did they inform you that they were getting information about your supplies to Apex from the Vice-President of the Apex Smelting Company?
 - A. No.
- Q. At that time, didn't they in fact offer to buy all of your production?
- A. They did. They said they would take our production at \$1.10.
 - Q. From then on in? A. That's right.
- But you didn't have any information about this background of dealings between Mr. Christianson of the Apex Company and Mr. Laub of the Vanadium Corporation of America at that time. did vou? [775] A. I did not.
- Q. Now, Mr. Nisley, direct your attention to that period of time just after or toward the termination of your toll agreement with the Metals Reserve Company and the conditions in the industry as they existed in that period of time.

To begin with, you had some meetings with Mr. Burwell, objecting to the closing down of the Nisley-Wilson plant, didn't you?

A. We did.

- Q. And didn't you also have some correspondence with the Government complaining about the treatment you had received at the hands of Mr. Burwell and Mr. Hill, the so-called agents of the Metals Reserve?

 A. We did.
- Q. Do you have that correspondence with you now, Mr. Nisley?

 A. No, I do not.
 - Q. Well, do you have, in the courtroom?
 - A. I don't believe I do.
- Q. Well, do you recall what was the complaint you made to the Government about the activities of United States Vanadium Corporation?

Mr. Archer: I object to that, your Honor. I think the record shows he was a competitor of ours at the time, and what he said back then certainly can't bind the defendants.

Mr. Alioto: No, but the conditions of the industry [776] at the time. These folks are making a point why that mill wasn't reopened, and I think any complaint he made to the Government relating to the treatment received is relevant on that point. Mr. Archer opened it up.

The Court: Overruled—the objection will be sustained. This is a matter between him and the Government?

Mr. Alioto: With him and the Government and U.S.V. was supposed to be the agent for M.R.C. at the time.

The Court: To whom did you address this letter?

To whom was it written, the Government or the agent? Whom did you write it to?

A. I think we contacted the agent direct and wrote the letters directly to the Metals Reserve Company in Washington.

The Court: I don't think it is material, but I will overrule the objection and let you put it in. I don't think it is material at all.

Mr. Alioto: Well, let me ask, first of all, did you have any direct conversations with Mr. Burwell about the closing down at the plant?

A. We did. We talked to him concerning closing our plant ahead of the other plants, and we didn't feel that we should be shut down ahead of the other plants that were operating under the Metals Reserve program and, in fact, we discussed—

Mr. Archer: Your Honor, I object unless he lays the foundation for this conversation as to time and place and [777] if it concerns Mr. Burwell, I think Mr. Burwell should have been asked about that.

The Court: I think you went into that fully on his direct examination, stating the conversations with Mr. Burwell, and with Mr. Whitaker——

Mr. Alioto: I think that was a conversation in an earlier period, if your Honor please, and not in this later period. The reason I'm inquiring about it now——

The Court: Well, at the time that you had this conversation with Mr. Burwell, he was representing an agency of the Government?

A. Yes, your Honor.

The Court: Objection will be sustained. I don't think it is competent.

Mr. Alioto: Well, on the matter of the agency of the Government, Mr. Nisley, let me take you back to that conversation with Mr. Hill in October of 1942. Do you remember that conversation?

A. 1 do.

Q. Did you at that time make any objection to being put under an arrangement where you couldn't handle your own vanadium oxide supplies?

Mr. Archer: I object.

A. We did.

Mr. Archer: I object to the question as leading.
The Court: The question is leading and suggestive. Let him testify.

Mr. Alioto: I think he has already testified on this point fully, if your Honor please, but I will have him say it again.

Q. Do you recall a conversation you had in October of 1942? A. I do. We had received——

Q. Who was present at that conversation?

A. Myself, Mr. Wilson, Mr. Hill and later on Mr. Burwell.

Q. All right. Now, tell us what was said in the matter of private production at the time.

A. We had received a telegram from the Metals Reserve Company and, I believe, also from War Production Board, stating that the United States Vanadium Corporation had been instructed to get us under way. And we were accusing—we had gone

into Grand Junction to see Mr. Hill, Mr. Burwell regarding this telegram. They denied that they had any knowledge of it, that they hadn't been informed of any agreement to put us back into operation, and we were accusing them of not following out the Metals Reserve orders.

Mr. Hill stated at that time to us that—he got sort of angry and he stated—he said, "My salary is paid by United States Vanadium Corporation, not by the Metals Reserve Company."

- Q. And how long did it take, then, to get that contract to you, from the meeting in October until you started working [779] under the Government program?
- A. As I previously testified, the contract was finally dated January 26 and actually delivered to us about the 3rd or 4th of February.

The Court: I think you've been all over that on direct examination, haven't we?

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Mr. Alioto: No. I think that concludes this phase of it now, if your Honor please, after this controversy with Mr. Hill, which he didn't mention in his direct examination.

- Q. Now if we could take you back to this later period, Mr. Nisley. Did the partnership of Nisley and Wilson delegate Mr. Gardner to speak to Mr. Burwell about not closing this plant down?
- A. We did. Mr. Gardner contacted Mr. Burwell—
 - Q. What happened?
 - A. Mr. Gardner told me that—

The Court: Now-

Mr. Archer: I object to that, your Honor.

Mr. Alioto: Just don't tell us what Mr. Gardner said.

Mr. Gardner at that time was a contractor, was he not? A. He was.

Q. And he wasn't active in the operation of the business?A. No, not directly.

Q. He was a rather substantial man in this contracting [780] business, wasn't he?

A. Yes, he was.

Q. Now, you sent him to Mr. Burwell for the purpose of trying to have him keep that plant open during this period of time?

A. That's correct.

Q. Now without telling us the conversation that Mr. Gardner had with Mr. Burwell, as a result of that conversation did you get any help from Mr. Burwell about that matter?

A. We did not.

Q. Now, then, when your plant was closed down, what were they doing down at Durango?

A. Durango was still operating.

Q. How long thereafter did Durango operate?

A. I can't answer that. I don't know how long it operated.

Q. When your plant was closed down, what were they doing at the Vanadium Corporation of America plant?

A. They were still operating.

Q. And how long after that did that continue to operate? A. I can't answer that.

Q. Now during the period of time when you

(Testimony of Frank Nisley.) were making these inquiries of Continental Ore, about which we have had some correspondence here, and after your plant had been closed down by Metals Reserve, what was the situation with respect to the Gateway Alloy Mines located tributary to the Gateway mill, [781] had that been released by the Metals Reserve yet?

A. It was. Our contract terminated the 1st of January, and the ore was still being stockpiled at Metals Reserve stockpile at Gateway.

Q. In other words, after your Gateway mill was closed down or at the time your mill was closed down, did you have access to the ore deposits at the Gateway mines?

A. We did not.

Q. For how long a period after January 1st did the United States Vanadium Corporation, acting as agent for Metals Reserve, continue to control those deposits?

A. Well, I don't know the exact time, but several months after we were closed down.

Q. In connection with those deposits, after you were closed down, what were they doing with the ore that was mined from those deposits, the Gateway deposits?

A. Well, it was being stockpiled at the Gateway mill.

Q. For how long a period of time did they continue stockpiling those ores there?

A. Well, I can't answer that. It was for several months after we were closed down they continued to come in.

- Q. At or about the time you were writing to Mr. Leir about plans for the future, after your plant had closed down, did you make any attempt to negotiate for the stockpile of ores that were right there at your Gateway mill? [782]
 - A. We did.
 - Q. Were you able to get them?
 - A. We were not.
- Q. What ultimately happened to that stockpile that was located at the Gateway mill, Mr. Nisley?
 - A. I believe it was moved to Durango.
- Q. Now in connection with Durango, you were given some figures on the blackboard here as to what your costs of production may have been at the time. I think you testified there was some document that indicated cost of production of 80c?
 - A. That's correct.
- Q. And you were asked whether you heard Mr. Burwell give certain testimony with respect to that?
 - A. That's correct.
- Q. Now, do you recall whether or not the Durango mill had a higher cost of production—that is, the Durango mill built and managed by United States Vanadium Corporation, had a higher cost of production than the Gateway mill that you were operating?

Mr. Archer: I object to that as without foundation.

The Court: Sustained. It is immaterial.

Mr. Alioto: Except, if your Honor please, that—

The Court: No, that wouldn't have anything to do with it. There may have been different conditions or circumstances there that would have controlled the price of production.

Mr. Alioto: Well, I don't understand how it was [783] relevant here, if your Honor please.

The Court: Objection sustained. Exception allowed.

Q. (By Mr. Alioto): Did Mr. Burwell tell you at any time that they were going to close down your mill because your cost of production was out of line?

Mr. Archer: Well, I object to that as leading.

The Court: Objection sustained.

Mr. Alioto: I submit, if your Hoonr please, that the subject is relevant.

The Court: Exception allowed.

Mr. Alioto: On the ground that it is leading? Is that the objection? I don't want to go into the subject if your Honor has just shut off the subject. But I thought the objection was sustained—

The Court: I don't think it is material to go into the subject, but the objection was sustained because the question was leading and suggestive.

Mr. Alioto: All right.

Then, let me rephrase that question.

Q. Did you have any discussion with Mr. Burwell about the cost of production of the Gateway plant at or about the time that it was closed down?

A. Not to my knowledge. The only discussion we had was—the only objection they gave to us

was that we didn't have an acid-producing plant to process the tailings at that time, [784]

- Q. In other words, is it correct to say that at no time did anybody object, so far as the Gateway plant was concerned, on account of any so-called cost of production?
- A. There was no objection to the cost of production.
- Q. Now, then, I want to inquire about what your partners were doing at or about the time that the plant was closed down. Had Mr. Gardner ever been active in the operation of the mill itself!
 - A. No.
- Q. What was Mr. Gardner's actual business? You said "contractor," but what was the nature of his business at the time?

The Court: How's that material?

Mr. Alioto: Well, if your Honor please-

The Court: You're taking a lot of time on this case and the Court has been very generous in permitting you to offer a great deal of testimony here, much of which has nothing to do with the issues in this case. We want to try this case: we want to finish it at least this summer.

Mr. Alioto: I think we will wind up in about ten minutes, and I suggest it will be tried a lot faster than most other antitrust cases have been tried. I think we are going to wind up in about a day and a half. I think that's a pretty good record on this type of case.

The Court. Go ahead. [785] * * * * *

754 Continental Ore Company, et al., vs.

Tuesday, June 10, 1958-10:00 O'Clock A.M.

FRANK NISLEY

called as a witness by the plaintiff, being previously sworn, resumed the stand and testified further as follows:

The Clerk: Continental Ore et al vs. Union Carbide et al, further trial.

Redirect Examination—(Continued)

- Q. (By Mr. Alioto): Mr. Nisley, there are two matters I want to cover rather hurriedly. Yesterday afternoon late you were interrogated by Mr. Archer about an exchange of correspondence between you and Mr. Henry Leir of the Continental Ore Company with respect to the conditions insofar as the Gateway plant was concerned after the termination of the Metals Reserve program at the Gateway plant. You have that examination in mind, do you, Mr. Nisley?

 A. Yes.
- Q. Now, the letters read to you by Mr. Archer, were they the only letters exchanged by you and Mr. Leir after January 1st of 1944?

 A. No.
- Q. There were other letters in which you purport to set out the conditions in the industry, were there not?

 A. That's correct.
- Q. I show you, Mr. Nisley, an original telegram from [788] Nisley & Wilson to Continental Ore Company dated January 13, 1946, and ask you to look at that and then state whether or not that is a telegram that you sent to the Continenal Ore

Company on or about the date that the telegram bears.

- A. Yes, January 13, 1944.
- Q. Now, then, there was a letter read yesterday afternoon about an offer of 300,000 pounds of vanadium oxide, I believe. Do you recall that, Mr. Nisley?

 A. Yes.
- Q. That referred to a stockpile that was there at the Gateway plant, did it not!
 - A. That's correct.
- Q. And you didn't own that stockpile at the time, did you? A. No.
- Q. Now, then, state whether or not the telegram that you just identified relates to the subject matter of that same stockpile and the same 300,000 pounds of oxide.
 - A. It does.

Mr. Alioto: We will offer it in evidence, if your Honor please, as part of the exchange of correspondence which counsel for the defendant admitted yesterday.

(Counsel examining offered documents.)

The Court: This accumulation of ore that you referred to, who was the owner of that at that time?

The Witness: Your Honor, it was owned by the [789] Metals Reserve Company.

The Court: That is the Government?

The Witness: Yes.

Mr. Archer: Your Honor, I object to the telegram on the grounds that in the latter part of it there are allegations of what we are doing, which 756

(Testimony of Frank Nisley.)

are thoroughly hearsay, thoroughly his conclusion, and certainly could not bind the defendant in this lawsuit.

Mr. Alioto: The problem is, if your Honor please, Mr. Archer has put in some correspondence and has left this one out.

The Court: The objection is overruled. Exception allowed.

(Mr. Holland examining offered document.)

The Court: (To jury.) You understand, this is the correspondence between this witness and the plaintiff and it is not binding upon the defendants in any manner.

Mr. Alioto: We are offering it, if your Honor please, to complete the exchange of letters and to show what this witness told Continental about the industry at the time. That is the purpose for which it is offered, in the light of the 300,000-pound offer we heard about.

Mr. Holland: Inasmuch as there is no mention of the vanadium company in the telegram, I assume it is only offered against Union Carbide, is that correct? [790]

Mr. Alioto: It is offered as part of the cross-examination of Mr. Archer yesterday, for whatever purpose that is in the record I am not prepared to say at this time, it is offered on that basis, to show what information this plaintiff received.

The Clerk: Plaintiff's Exhibit 75 admitted and filed into evidence.

(Telegram 1/13/44, Nisley & Wilson to Continental Ore, received as Plaintiff's Exhibit 75.)

Mr. Alioto: This is dated January 13, 1944, and it is addressed to Continental Ore Company from Grand Junction by Nisley & Wilson. It makes reference to another telegram to a man named Hatch.

Q. Would you be good enough to identify Mr. Hatch before I read this?

A. Mr. Hatch was connected with the War Production Board.

Q. That is the same Mr. Hatch you talked about in your examination by Mr. Archer yesterday afternoon? A. That's correct.

The Court: He was connected with what?

The Witness: The War Production Board.

Mr. Alioto: The War Production Board, if your Honor please.

(Reading.) "Continental Ore Company, 500 Fifth Avenue, New York. [791]

"We Cannot Purchase Ore 32 Cents Vanadium Contained and Sell For \$1.10. Am Sending Copy of Telegram to Hatch. Quote Reurtel. You State 52 Cents Is Content Basis and Transfer Cost Is 20 Cents. Granted. But When Ore Is Milled a Percentage of Values Are Lost In Tailings. Add The Cost of These Values to 20 Cents and We Still Wish to Know Difference 1 tween It and Our Offer of 26 Cents. Cost of 32 Cents Content Basis Makes Our Recovered Vanadium Cost 46 Cents Per

Pound Which We Cannot Stand. Durango Would Have a Similar Loss * * *"

Q. What is "Durango"—you mean the plant at Durango?

A. The plant at Durango.

Mr. Alioto: (Reading.) "Durango Would Have a Similar Loss and a Raise In Costs Therefrom Whether Figured As Additional Ore Cost As We Do For Additional Milling Cost As You Are Apparently Doing. Concerning Tailings Army Has Plant Urayan Recovering Values Tailings Much Closer to Gateway. We Have Tried to Get Rid of 1500 Tons Our Old Tailings Carrying Higher Vanadium Uranium Contents Than MRC or Uravans. We Cannot Sell Them So Far At Even One Dollar Per Ton. We Question Value of Tailings At Present Under Such Circumstances We Know Exists. We See No Curtailment Program Taking Place Other Than Shutting Down Our [792] Plant With a New MRC Operation At Rifle, Continued Operation All Other MRC Plants, Continuation of Ore Purchases and Ore Contracts. It Seems to Us Definitely and Clearly USV As Agents Are Using WPB Control to Completely Monopolize The Vanadium Industry. As Agents They Have Our Ore Supply Under Contract; As Agents They Know Our Present Operating Costs and We Cannot Operate At An Ore Cost of 46 Cents; As Agents USV Used Curtailment Program to Stop Our Operation Ahead of Any Other Plants Including MRC Plants. We Received No Directive From Either WPB or MRC. We Were Forced Out of Private Produc-

6

(Testimony of Frank Nisley.)

tion Into MRC Program If We Wished to Continue Business, The Theory Being That The MRC Program Was Necessary For The War Production Now The Agents Are Continuing Their Program of Completely Monopolizing The Industry With The Aid of The WPB and MRC Regula-If This Is Not The Case Why Should We Be The First and Only Plant to Be Shut Down: Why Should We Be The Only Plant Penalized By The MRC and WPB Program, If There Is No Further Justification For Producing Vanadium In Excess of Requirements, Why Are Not Government Plants Closed First Instead of Private Owned Plants and Especially Why Isn't-The Purchase of Ore Stopped. We Realize That We Are Small Producers Not Appreciably [793] Affecting Vanadium Production As a Whole, Yet Our Little Business Is Going Part of The America We Are Fighting For. If The USV Is Going to Take Advantage of These War Conditions Together With MRC and WPB Aid to Completely Monopolize The Industry and Force All Others to Discontinue/Business, It Makes Us Wonder Just What Our Boys Are Fighting For.

"Nisley & Wilson Vanadium Mill."

Q. Now, in connection with these negotiations referred to here and the 300,000 pounds of vanadium you spoke of, did you ever buy that from the MRC?

A. No.

Q. Metals Reserve. And you were never able to

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(Testimony of Frank Nisley.)

buy at the cost that you thought you could sell and market it for?

A. No.

Q. You tried to? A. Yes, we did.

The Court: Now, your controversy that you referred to in this telegram was entirely between you and the Government agents, was it?

The Witness: Well, your Honor, in an attempt to answer that, no. It goes back prior to the time that we went in the Metals Reserve Program.

The Court: Now, they owned this ore—the Government owned this ore, and you were trying to buy it, they [794] wouldn't sell it to you; is that it?

The Witness: At this time—

The Court: Yes.

The Witness: ——we had been trying to buy the ore, negotiating for it.

The Court: And the Government wouldn't sell it to you?

The Witness: Not at that time, no.

The Court: All right.

Q. (By Mr. Alioto): But this was the 300,000 pounds of ore you offered Mr. Leir and Continental; this was it, wasn't it?

A. That's right.

Q. And you never had it? A. No.

The Court: That was the substance of your telegram to Mr. Leir, was explaining to him why you couldn't fill his order?

The Witness: Yes. This telegram, your Honor, was to explain to him the conditions existing in the industry at the time.

The Court: All right, proceed.

Q. (By Mr. Alioto): Now, then, as of January 31 of 1944 you wrote another letter to Continental, that I would like to show you in a moment, after counsel has finished [795] reading it.

(Counsel examining.)

Q. (By Mr. Alioto): Counsel having read the document, I show you the letter, Mr. Nisley. Would you examine it and then state whether or not that is a letter written by you on or about the date it bears?

A. (Witness examining): It was.

Mr. Alioto: We will offer this into evidence as part of the exchange of correspondence put in by Mr. Archer yesterday.

Mr. Holland: I assume it is not offered against Vanadium Corporation.

Mr. Alioto: It is offered as part of the exchange of correspondence put in by Mr. Archer yesterday—whatever the record ist on that. I don't know.

Mr. Holland: As far as Vanadium Corporation is concerned, it objects to the letter as any evidence against it. There is no reference to Vanadium Corporation in any of this correspondence and no showing that Vanadium Corporation had anything to do with the subject matter.

The Court: The letter will speak for itself.

The Clerk: Plaintiff's Exhibit 76 admitted and filed in evidence.

(Letter 1/31/44, Nisley & Wilson to Leir, received in evidence as Plaintiff's Exhibit 76.)

Mr. Alioto: This letter is dated January 31, 1944

—This is after your M.R.C. program had terminated?

A. That's correct.

Q. And this is after you had attempted to negotiate for what you call this 300,000 pounds of vanadium oxide, is that right?

A. That's right.

Mr. Alioto: (Reading.)

"Dear Mr. Leir:

"As you know, Mr. Gardner, Mr. Wilson and myself are owners and operators of the Gateway plant. Mr. Gardner has the old plant, and Mr. Wilson and myself have added considerable new equipment and have been operating under a contract with Mr. Gardner.

"Since the curtailment of Vanadium production and the lessening need for it, I have been called to the service. This will affect our contract with Mr. Gardner. Since the plant cannot be operated at the present time, and it doesn't look as if it could for quite some time, we are going to have to sell either our interest in the plant or dismantle it. Since I must leave shortly, we are going to have to act quickly.

"We are all very sorry to have to discontinue, but we see no other way out at present. Mr. Gardner [797] has taken an active interest in the operation and has helped us in getting our problems straightened out. The local M.R.C. told us that the mill had made a very good extraction, in fact, better than some of the others under the M.R.C. The cake was

of good quality. We had a very satisfactory operation during December, especially.

"The big mill at Uravan was closed down last Saturday night and they are letting a number of their men go. Their other plants are still operating full-blast, however. We do not believe that they will ever let the price of the crude ore adjust where we could operate at \$1.10 again, at least for quite some time.

"Concerning our bill with you, we will get things straightened out shortly and send you a check. We would like to have you also include the amount we owe you for this year so it can all be straightened out at once.

"We want you to know we sincerely appreciate all you have done for us in the past. We have never had business dealings with anyone who has treated us any finer than you and we really do appreciate your cooperation and help. We sincerely wish we could continue to do business with you.

Sincerely yours,

Frank Nisley." [798]

Q. Now, with respect to the two men who were left, Mr. Nisley, Mr. Hays Wilson was not a metal-lurgist, was he?

A. He was not.

Q. And he couldn't run that plant on his own, could he, Mr. Nisley?

A. His capacity in the plant was looking after the mechanical equipment.

The Court: A little louder, please.

The Witness: I say, his position in the operation

was that of taking care of the mechanical equipment. [799]

- Q. And this is information which you transmitted to Mr. Leir, isn't it?
 - A. That is correct.
- Q. Just a very few questions about this socalled kitchen arithmetic that was gone into for some time yesterday.

This 80-cent cost so far as the Gateway plant was concerned was the cost as of June, 1943, was it not?

A. That is correct.

- Q. Now, that 80-cent cost included something more than just straight actual operations at the time, didn't it?
- A. Yes. Under the amendment to the toll agreement, the United States Vanadium as agents for Metals Reserve were allowed to take 10 cents per pound out of this 80 cents to apply on the R.F.C. loan. We had to amortize that loan completely in a very short time.
- Q. You put that amortization of that loan completely down as a cost of business?
 - A. That is correct.
 - Q. Not just the interest, but the whole thing?
 - A. That is correct.
- Q. In June on this 80-cent basis, in June of 1943, was your production as much as it was, say, in December, 1943?
- A. No, it was not. In June, 1943, we produced 8,792 pounds net V₂O₅. By December we had increased that to 10,6—roughly 10,700, an increase of

approximately a little over twelve per cent. [800]

Q. And obviously the increased production would affect the unit cost when it is put on a per pound basis?

A. That is correct.

Mr. Alioto: We have no further questions.

Recross-Examination

- Q. (By Mr. Archer): Mr. Nisley, when you submitted your estimate of costs in June of 1943 to the Metals Reserve Company, didn't you state at that time that you thought your 80-cent cost was a representative cost of your operation?
 - A. At that time, that is correct.
 - Q. You thought it was representative?
 - A. At that time.
- Q. And wasn't the reason you submitted the cost so they could determine how much you would be paid for processing the ore?
 - A. That is correct.
- Q. And you were paid this amount for every month from June through December, 1944, weren't you?
 - A. That is correct, there was a-
- Q. I am wrong there. June through December, 1943.
- A. 1943, that is correct. There was each month a report submitted to the Metals Reserve Company as to the cost.
- Q. And that report, one of which is in evidence, correctly reflects your cost, doesn't it? [801]

A. Yes, including the ten cents per pound reflected there.

Q. Regarding this exchange of correspondence in January of 1944, I believe the first exhibit that Mr. Alioto put in was a telegram in January, 1944, and I show you now a copy of Mr. Leir's reply dated January 13th, 1944, and ask you whether you can identify that.

A. Yes.

Mr. Alioto: No objection.

Mr. Archer: Defendant's Exhibit next in order I offer, to complete this correspondence, Mr. Leir's reply to Frank Nisley, dated January 13th, 1944.

(The document referred to was thereupon received in evidence and marked Defendant Union's Exhibit 3-D.)

Mr. Archer: This exhibit is dated January 13th, 1944, to Frank Nisley, re Vanadium Ore from Metals Reserve.

Q. That referred to that stockpile, did it not, Mr. Nisley, the vanadium ore for Metals Reserve?

A. I believe so, yes.

Mr. Archer: (Reading)

"We confirm our wire this morning as per copy enclosed. It seems that in a wire you sent to Mr. Hatch"——

Q. Mr. Hatch was of the War Production Board, was he not? [802]

A. That is correct.

Mr. Archer: (Reading)

"It seems that in a wire you sent to Mr. Hatch where you mention the price of 52 cents and the \$8.00 freight differential, you and Metals Reserve computed your respective figures on different bases. Metals Reserve seems to talk about the price per pound of recovered V₂O₅, whereas you talk about the price per pound of V₂O₅ in the crude ore.

"Mr. Hatch incidentally pointed out that if the stockpile were milled at Durango instead of at your plant, values could be extracted from the tailings, which is not the case if you process this stockpile ore. This fact alone, Mr. Hatch claims, cancels out the freight difference. In other words, it would make it worthwhile for Metals Reserve to spend the \$8.00 per ton for the freight. It seems obvious to us that although he did not want to mention it. Mr. Hatch referred to the recovery of the uranium. Uranium is quite in demand at the present time and we wonder whether you could not materially improve your position in this scheme by installing some equipment which would allow you to recover uranium concentrates containing, say, ten to twenty per cent U₃O₈," [803]

- Q. UsOs refers to uranium oxide, does it not?
- A. That is right.

Mr. Archer: "This would do away with any disadvantage between you and Durango on that score. From your letter of January 9th, Sunday, it appears that Mr. Gustafson—"

Q. Now, who is Mr. Gustafson?

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Mr. Alioto: What is the date of the letter, Mr. Archer?

Mr. Archer: January 13th, 1944.

A. Well, I can't recall. I believe that he was connected with Metals Reserve, but I am not positive of that.

Mr. Archer: I think that is right.

"From your letter of January 9th, Sunday, it appears that Mr. Gustafson first offered you two per cent ore from the stockpile at 32 cents, whereas you wanted to pay 26 cents for that grade. You say that later on Metals Reserve even increased the price from a 1.8 per cent ore at 32 cents.

"According to what Mr. Hatch said, it will be rather difficult to get Metals Reserve to agree to a price below 32 cents. We therefore wired you that it may be advisable to pay that price for a two per cent ore if at all possible, our idea being that you only buy a quantity sufficient for one month's [804] operation, so that even if the profit margin is very slim, you could maintain your organization and tide it over to the time when Metals Reserve retires from the market.

"Mr. Hatch mentioned confidentially that Metals Reserve will soon step their buying operations. Prices will then automatically go back to normal, which should allow you to operate with a profit. This is also the reason why we recommended that you do not insist upon Metals Reserve giving you an option on the entire stockpile.

"If prices really decrease it may be easier for

you to negotiate with Metals Reserve in a few weeks time, if you have no option at a set price. It may then be possible for you to buy your monthly requirements on the basis of the price in the open market.

"We would appreciate your informing us what you are going to do so that if you so desire, we can obtain additional information for you through Mr. Pleasants, or try to hasten a decision in Washington.

"Unfortunately Mr. Pleasants had already left for Washington when your letter of January 9th arrived, so that he could not make use of your recommendation to Senator Johnson. We now hope to hear from you.

"Very truly yours,-

"The Continental Ore Company, Henry J. Leir."

Q. Now, Mr. Pleasants, I believe you referred to in your testimony yesterday in regard to an account with him, that he was a lawyer that you and Continental Ore used to negotiate for this stockpile and other matters, isn't that correct?

A. That is correct.

Q. I now show you a copy of Mr. Leir's letter of January 9th, 1944 to you referring to the recent correspondence and wires on this subject, and ask you whether you can identify it.

Mr. Alioto: You do not have to identify it, Mr. Archer. We stipulate to its authenticity.

Mr. Archer: As Defendant's Exhibit next in order, I offer a letter dated January 9th, 1944,

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from Mr. Leir to Frank J. Nisley, to which is attached a copy of the letter dated January 8th, 1944, from Mr. Pleasants to Continental Ore.

Mr. Alioto: We have no objection.

(The documents referred to were thereupon received in evidence and marked Defendant Union's Exhibit No. 3-E.)

Mr. Archer: This is a letter from Mr. Leir to Frank Nisley, your Honor, dated January 9th, 1944. This was still in the period when you were negotiating for the stockpile, is that not correct, Mr. Nisley?

The Witness: Yes, during the period, yes, sir. Mr. Archer: (Reading) [806]

"Dear Mr. Nisley: Re Vanadium

"We refer to our recent correspondence and your wires. Mr. Pleasants went to Washington again on Monday, January 17th. Enclosed find original of his report, which unfortunately does not leave much hope of accomplishing anything through Senator Johnson or the W.P.B. It seems to us that your aim should be to have your 1943 toll agreement extended at least until M.R.C. stops buying ore at the subsidized price or preferably thirty to sixty days beyond that date. Please keep us informed.

"Very truly yours, Continental Ore Company, Henry J. Leir."

The enclosed letter is dated January 8th, 1944 from Mr. Pleasants to Continental Ore Company.

"Gentlemen:

"I refer further to the Nisley and Wilson matter. Hatch's position——"

Q. Hatch is the one from the War Production Board, is that not correct?

A. That is correct.

Mr. Archer: "Hatch's position is that the administration of the program on vanadium is entirely up to the Metals Reserve Company, and inasmuch as the W.P.B. is no longer interested in accumulating [807] a further stockpile of vanadium, the W.P.B. cannot authorize the production of any excessively priced vanadium. Hatch is not very friendly as he feels that it is merely an ordinary war loss which is being sustained by Nisley and Wilson due to the shift in war requirements.

"Senator Johnson was not at all helpful. He is very definitely opposed to any reduction in the price of ore to miners. He apparently did make an effort to procure a more favorable concession from M.R.C. on the stockpile material. He was entirely unsuccessful in doing this, as M.R.C. stood pat. I do not believe that they can anticipate any assistance from this quarter at all."

- Q. In January 1944 you found out that you would not be able to buy the stockpile at your price, didn't you, Mr. Nisley?
- A. The objection that we were referring to in relation to buying the stockpile was that United States Vanadium as agents for Metals Reserve had told them that our tailings would have to be transferred to Durango to be milled, and that was the reason—one of the reasons given for this ore price

to us. The United States Vanadium at that time were also agents for the Government, for the Army in the uranium program. They were operating a mill at Uravan, which was a much closer location to us, and this bears out the fact that we were complaining [808] because United States Vanadium, instead of giving us the chance of turning these tailings to Uravan, was requiring that they had to go to Durango, which was an excessive cost, which raised the cost of this ore to us, and Metals Reserve didn't know the difference. Some of this correspondence bears that out.

Q. At Durango they were processing not only your vanadium, but uranium?

A. They were also processing at Uravan for vanadium and uranium, both.

Q. Mr. Nisley, my question was: You found out in January, 1944, by this correspondence here, that Metals Reserve would not sell you the stockpile, didn't you?

A. That was the end result. We didn't get the stockpile.

Q. Mr. Nisley, the telegrams and the correspondence which I read to you yesterday offering the 300,000 pounds of vanadium was in March and April of 1944, were they not?

A. I believe that is correct.

Q. I understand from the Clerk that these exhibits are not available, but I will show, you the copy—

Mr. Alioto: I will stipulate with you on that. What do you want to stipulate to?

Mr. Archer: That the telegram referring to the 300,000 pounds of uranium at the rate of 600 pounds per day is dated April 4th, 1944.

Mr. Alioto: Okay, we will stipulate to that. [809]

The Court: Well, now, at that time did you know that you would not be able to buy the stockpile?

- A. At what time, your Honor?
- Q. In April, 1944, when you made the offer to Continental Ore Company.
- A. Your Honor, I believe that negotiations were opened up again for the possible purchase of the stockpile, but by that time our plant had been closed for some three or four months. We had lost our key men and we were in a different position than we were at the beginning of January when we were first negotiating for the pile.
- Q. (By Mr. Archer): It is true, however, that Mr. Gardner had kept on the chemist which you had used in your plant after March of 1944, had he not?

 A. That is correct.
- Q. It is also true that Mr. Gardner's offer to lease the plant to the Continental Ore Company at three cents per pound produced was in July 1944, was it not?
- A. Well, I joined the service prior to that time, so I can't testify to what happened after I left.
- Q. It is also true that in Mr. Gardner's letter of July 14th, 1944, to Continental Ore Company,

he states, "The Metals Reserve's stockpile is untouched as yet, and considerable number of the miners are still in the district awaiting a place to sell the mill ore. If you should see any possible [810] way for us to operate, for new parties to take over our lease or any other arrangement, I would be more than glad to hear from you or Mr. Leir on the subject."

Mr. Alioto: The witness said he wasn't here at this time, if your Honor please. I do not understand how he can be questioned about it.

The Court: Well, if he knew, if he had knowledge of that, he can answer.

- Q. (By Mr. Archer): Did you have any knowledge on that?
 - A. I was in the service at the time.
- Q. Mr. Nisley, didn't you testify yesterday that the Army bought the stockpile at Gateway after July of 1944?
 - A. I was told that, yes.
- Q. You did not know that of your own knowledge, did you?

 A. I was told that.
- Q. So you didn't know it of your own knowledge?

Mr. Alioto: He was told it.

Further Redirect Examination

Q. (By Mr. Alioto): Just one question, Mr. Nisley: Did you ever take up Mr. Leir's suggestion of trying to get a month to month arrangement

with the Army so that you would be in tune with the market price whenever it developed?

A. As I recall, we did, but we were unsuccessful. [811]

Mr. Alioto: Thank you. That is all. Mr. Archer: No further questions.

(Witness excused.)

Mr. Alioto: At this time, if your Honor please, before calling Mr. Wolf to the stand, we offer as against the Electro Metallurgical Company a certain request for material from the Continental Ore Company in connection with its Apex contract. This is the letter dated June 14th, 1941, from Continental Ore to the defendant Electro Metallurgical Company, and a letter dated June 16th, 1941, from Continental Ore to Electro Metallurgical Company, and a reply of Electro Metallurgical Company dated July 31st, 1941.

Mr. Archer: Could I see them?

Mr. Alioto: Yes. We will offer them in evidence as plaintiffs' exhibit next in order. And we offer at this time a document previously marked as Plaintiffs' Exhibit 63 for identification, being an exchange of correspondence between the Apex Smelting Company and the Vanadium Corporation of America, dated March 11, 1940; April 8, 1940; April 20, 1940; and an inter-office memorandum from Mr. P. J. Gibbons to Mr. J. P. Gertler of Vanadium Corporation of America, dated February 14th, 1947.

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Mr. Archer: I have no objection to the June 16th and July 31st. The only question I have on the June 14th-we do not have a copy of the original of this in our files. [812] If it was sent, I have no objection to it.

Mr. Alioto: It was sent. It was sent from our office. I understand counsel does not object. We offer the Electro Metallurgical letters in evidence.

The Court: It will be admitted.

(The documents referred to were thereupon received in evidence and marked Plaintiffs' Exhibit 77.)

Mr. Alioto: They are very short requests, if your Honor please, which I would like to read to the Jury, and then I shall call Mr. Wolf.

Under date of June 14th, 1941, Mr. Henry J. Leir, President of Continental Ore Corporation, writes to Mr. C. G. Roser of the Electro Metallurgical Company, 30 East 42nd Street, New York City:

"Dear Mr. Roser:

"Re: Vanadic Acid.

"Please let us have your offer of the above material for shipment to the Apex Smelting Company of Chicago."

On June 16, 1941, two days later, another letter to Mr. F. P. Gormely, General Manager of Electro Metallurgical Company, 30 East 42nd Street, New York City:

"Gentlemen:

"As you know, the Apex Smelting Company of

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Chicago has been in the aluminum smelting [813] business for more than 20 years.

"Last year they entered into the production of certain ferro alloys by the alumino-thermic process, and have created good facilities for this particular manufacture which, if necessary, could be easily enlarged.

"Would you be interested in 'farming out' a certain quantity of vanadic acid, and allow us to convert it for your account into low carbon ferro vanadium?

"We shall be awaiting the pleasure of your reply to the above suggestion, and hold ourselves at your disposal for any personal discussion you might like to have on this subject."

The answer by Mr. Gormely, Vice-President and General Manager of Electro Metallurgical Company, under date of July 31st, 1941 is as follows:

"Mr. Henry J. Leir, President, Continental Ore Corporation, 500 Fifth Avenue, New York City.

"Dear Sir:

"Please pardon the delay in replying to your letter of June 16, asking if we would be interested in having you convert a certain quantity of vanadic acid for our account into low carbon ferro vanadium.

"I have reviewed this matter several times with [814] my associates and find that we are at the moment able to smelt all the vanadic acid which we have available. Should this situation change we will be glad to get in touch with you but see no

prospects at the moment that we would be interested in your proposal."

Mr. Holland: Mr. Alioto, these are two totally unrelated transactions. [814-A]

Mr. Alioto: We will offer them separately.

Mr. Holland: You are offering them?

Mr. Alioto: We will be very happy to, Mr. Holland.

We first offer the 1940 correspondence between Apex and Vanadium Corporation of America.

I understand there is no objection to that, Mr. Holland?

Mr. Holland: No objection.

The Clerk: Plaintiff's Exhibit 63 admitted in evidence—heretofore marked for identification, admitted and filed in evidence.

(Whereupon, Plaintiff's Exhibit 63 for identification was received in evidence.)

Mr. Alioto: We will offer separately letter dated February 14, 1947.

Mr. Holland: What is the date of that?

Mr. Alioto: February 14 of 1947. It is interoffice memorandum from Mr. Gibbons of the Vanadium Corporation of America.

Mr. Holland: Would you have any objection to offering the entire correspondence on that subject at the same time?

Mr. Alioto: I have no objection at all, Mr. Holland.

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 ☐ Would you be good enough to show me what you
 deem the entire correspondence?

(Discussion between counsel.) [815]

Mr. Alioto: We have no objection to submitting the entire correspondence.

The Clerk: Plaintiff's Exhibit 78 admitted and filed in evidence.

(Whereupon, inter-office memorandum dated 2/14/47, P. J. Gibbons to J. B. Girdler; letter dated 2/24/47, Girdler to Continental Ore Company; letter of Continental Ore Company by J. A. Mirel to Vanadium Corporation of America; letter dated March 13, 1947, Girdler to Continental Ore Company, was received in evidence and marked Plaintiff's Exhibit 78.)

Mr. Alioto: The first letter is dated March 11, 1940. It is from the Apex Smelting Company, by Mr. Al Lippa, to the Vanadium Corporation of America at 490 Lexington Avenue, New York, New York.

"Gentlemen:

"Please be good enough to let us have your very best price on quantity lots of vanadium pentoxide crushed to one-quarter inch and under. We desire this material for domestic consumption.

"Your immediate response will be very much appreciated."

That's March 11th, and on April 8, 1940, Mr. Lippa again writes to them and says:

"Vanadium Corporation of America

490 Lexington Avenue

New York, New York [816]

"Gentlemen:

"We enclose a copy of letter written to you on March 11, to which we do not seem to have received a reply.

"This, no doubt, has been overlooked, and we would appreciate hearing from you."

April 20, 1940, Mr. Gustav Laub, Assistant Vice-President, Vanadium Corporation of America, replies:

"Apex Smelting Company

Chicago, Illinois

Attention: Mr. L. Lippa

"Gentlemen:

"In response to your letter of April 8, enclosing copy of your letter of March 11th which apparently went astray, we would advise that our position is such that we have no material to offer you at present."

That's dated April 20, 1940.

(The above letters read from Plaintiff's Exhibit 63 in evidence.)

Mr. Alioto: February 14, 1947—this is in the postwar period—Mr. Gibbons on February 14, in an inter-office memorandum to Mr. Girdler, writes as follows, on the subject "Continental Ore Company Inquiry," to J. P. Girdler.

"With reference to letter from the Continental [817] Ore Company dated February 11, 1947, in

which they advise they would be interested in one minimum carload per month of vanadium pentoxide for delivery, commencing with April and through July, 1947, after study of existing commitments for this commodity and the sales estimates supplied to me by the sales department covering the current year, we find our entire production capacity will be taken up for the year 1947.

"However, it is possible that we may be able to supply a car during the period mentioned if we were called upon for it, but at this time we could not guarantee even that amount."

That is the inter-office correspondence.

Then the letter that goes from Girdler to Continental Ore Company on February 24, ten days later:

"Continental Ore Company

"Gentlemen:

"With reference to your letter of February 11, 1947, with respect to contracting for one carload per month of black vanadium oxide, fused, beginning in April and through July, 1947, i.e., four carloads, after reviewing our existing commitments for this commodity and estimated sales, we believe that we will be able to take care of these four carloads if [818] delivery is extended over a six months' period beginning with April, 1947.

"Our present contract price for fused black vanadium oxide is \$1.10 per pound contained V₂O₅, f.o.b. Seller's Works, Bridgeville, Pennsylvania, with freight charges allowed to destination, unless such freight charges are in excess of the rate to

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St. Louis, Missouri. In such case, free charges to St. Louis will be allowed.

"The above price will be in effect until March 31, 1947 and thereafter for each calendar quarter-year unless revised in writing by us at least 15 days prior to such quarter-year.

"This offer, which is subject to our usual contract terms, is subject to acceptance by execution of our formal contract on or before March 15, 1947, so would ask that you advise us promptly whether or not you are interested in having us submit our contract to cover the tonnage abovementioned."

On March 7, 1947, Mr. Mirel of the Continental Ore Company—J. A. Mirel—replies to the Vanadium Corporation of America:

"Gentlemen:

"Receipt is acknowledged of your letter dated February 24 in which you submit us your proposal for four carloads of black vanadium oxide at the contract [819] price of \$1.10 per pound contained V₂O₅, f.o.b., your works, Bridgeville, Pennsylvania, with freight charges allowed to destination, unless such freight charges are in excess of the rate to St. Louis, Missouri. In such case, freight charges to St. Louis will be allowed.

"We have submitted our proposal to our buyers and have been informed that our price is out of line with current market offerings. From what we have been able to ascertain in our subsequent discussions, the oxide would have to be made available to us around \$1.00 to \$1.05 in order to permit doing the business. We would thank you to give consideration to a revision in your price to conform with the price indicated above, as we believe prospects appear favorable for doing the business at our indicated figure."

Mr. Alioto: And actually, Mr. Holland, there was another letter saying they wouldn't reduce the price, that's correct, is it not?

Well, we will have it at a later point.

Mr. Holland: Yes, here it is. You may have that (handing to counsel).

Mr. Alioto: No objection to having that admitted as an exhibit? [820]

Mr. Holland: Wait a minute, that's the wrong one.

Mr. Alioto: No, this isn't it.

Mr. Holland: That's it (handing to counsel).

Mr. Alioto: The final document, which we ask be physically attached to this, if your Honor please, is Mr. Girdler's letter to Mr. Mirel:

"With reference to your letter of March 7, relative to our offer to sell black vanadium oxide fused, we regret that you are not interested in our proposal for the sale of this material at \$1.10 per pound contained V₂O₅, as quoted in our letter of February 24.

"We are not prepared at this time to consider making a reduction in our current price.

"Very truly yours,

"John B. Girdler,

"Assistant General Manager of Sales."

Mr. Wolf, would you be good enough to take the stand.

MARTIN WOLF

called as a witness on behalf of the plaintiff herein, being first duly sworn, was examined and testified as follows:

The Clerk: State your full name, your occupation and your address to the Court and jury.

A. Martin Wolf. I reside at 300 Central Park West, New York City. [821]

Direct Examination

Q. (By Mr. Alioto): Mr. Wolf, what is your present business or occupation?

A. I am Vice-President of the Continental Ore Corporation.

- Q. Vice-President. For how long a period of time have you been the Vice-President of the Continental Ore Corporation?
 - A. About 20 years.
- Q. What do your duties involve in connection with the Vice-Presidency of the Continental Ore Corporation?
- A. The selling, the buying, shipping and selling of all the materials that we handle.
- Q. What is the nature of the materials that the Continental Ore Corporation handles?
 - A. Ores, minerals and alloys.
- Q. Would you be good enough to designate some of them, for the record, please?
- A. Well, there is iron ore, pig iron, manganese ore, ferro-manganese, chrome ore, ferro-chrome, tungsten ores, ferro-tungsten. That's about it.

- Q. You handle-
- A. Those are the main ones. Fluorspar and all grades, actually.
- Q. Now, what is the source of these materials, the iron ore, the manganese ore, the ferro-manganese, the ferro-chrome, the ferro-tungsten, and these various ores—just state them, generally?
- A. Well, generally, they are both domestic and foreign materials.
- Q. Would you be good enough to tell us about the general classification of customers that buy these ores, alloys and minerals from you?
 - A. They are mainly the steel companies.
- Q. Would you be good enough to name the steel company customers of these ores, minerals, and alloys?
- A. Well, it's actually the list of the American steel industry. It starts with U. S. Steel, Bethlehem Steel, Republic, Inland Steel, Jones & Laughlin, Weirton, Wheeling, Detroit Steel, Ford Motor, Columbia-Geneva, Sheffield Steel in Houston, Midland—it's the list of the steel industry, in fact.
- Q. I think we have a pretty fair notion of the other things you have mentioned, but will you tell us what fluorspar is?
- A. Fluorspar is a mineral that is used in the steel industry as a flux to eliminate the impurities in the steel.
- Q. These samples I'm holding in my hand, are these samples of fluorspar?

 A. That's right.

Q. Would you be good enough to tell us where fluorspar is mined?

A. Fluorspar is mined in the western states, the southwestern states of the United States, in Mexico, Spain, Italy, Germany, other places. [823]

Q. What are the western states of the United States where fluorspar is mined?

Mr. Holland: May it please the Court, the evidence seems to be entirely on products other than vanadium. May I ask Mr. Alioto what the purpose is?

Mr. Alioto: We will get down to the purpose. We will get down to vanadium in just a moment. I want to develop—

The Court: Answer the question. Go ahead.

Mr. Alioto: What are the states where fluorspar is mined?

A. Colorado, Wyoming, Nevada, Utah, New Mexico, Arizona, Texas, Illinois and Kentucky.

Q. As far as the first five are concerned, are they substantially the same states as where vanadium ore is mined?

A. That's right.

Q. Mr. Wolf, I want to inquire about your personal experience in the industry of ores, alloys and minerals. Would you be good enough to tell us when you first secured your employment, any employment, in that industry?

A. That was in 1930.

Q. How old were you at the time?

A. In 1930 I was 18.

Q. How old are you now?

- A. I am 45.
- Q. Where did you secure this employment?
- A. Well, I started my apprenticeship in the firm my father was with, an ores and mineral firm in Germany, in Frankfurt, Germany.
- Q. What was the nature of the business carried on by that firm?
 - A. Ores, minerals and metals.
- Q. And what was the nature of the duties that you personally performed in connection with the activities of that firm?
- A. Well, I learned how to buy, sell, ship and insure ores and minerals.
- Q. Now, then, how long did you remain with that firm?
- A. I remained with that firm in Germany until 1933, when Hitler came to power.
 - Q. Then what did you do?
- Then I asked for a transfer to one of the foreign offices of the same firm, and I was transferred to France and then to Holland.
 - Q. With the same company?
 - A. Same company.
- Q. What did you do in France and Holland for that same company?
 - A. Exactly the same thing.
- Q. Then what was the next employment you had in this industry?
- A. In 1937, I met Mr. Leir who was operating in Luxembourg, and I joined him. [825]

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- Q. What was the name of the company under which Mr. Leir operated in Luxembourg?
 - A. It was the S. A. des Minerais (spelling).
 - Q. What does S. A. stand for?
 - A. That means incorporated.
 - Q. And des Minerais, what does that title mean?
 - A. Corporation of minerals.
 - Q. Minerals? A. Yes.
- Q. What were the duties that you actually discharged in your employment with the S. A. des Minerais in Luxembourg?
- A. Well, at that time we had three main businesses, fluorspar, refractories and ferro alloys.
- Q. What were the ferro alloys in which you dealt?
- A. Ferro-tungsten, ferro-vanadium and ferro-titanium.
- Q. What were the refractories in which you dealt?
 - A. Manganosite and manganosite bricks.
- Q. Maybe you better tell us what refractory means, and I include myself in that.
- A. We use refractories for furnace linings in the metal and steel industry to prevent the liquid metal charge from breaking out of the furnace. It's like an oven, a brick oven. They are more heatresistant bricks than ordinary bricks.
- Q. Now, so far as your ferro-vanadium was concerned, that [826] business in ferro-vanadium, did you have contracts for the production of ferro-vanadium at that time?

- A. That's right. We had a joint venture contract with a large French company who had their own hydraulic electric power station in the French Alps and were equipped to produce ferro alloys.
- Q. What was the name of that French company?
 - A. It was Fredet Kuhlmann (spelling).
 - Q. Is that hyphenated? A. I don't know.
- Q. What was the nature of the business that you carried on in connection with ferro alloys, specifically, and even more specifically with ferrovanadium?
- A. We had a contract with the—they were actually doing the producing and we would procure the raw materials and would handle the sales, and the financing was done fifty-fifty.
- Q. Do you recall what the source of your raw materials was?
- A. We usually—for instance, it was South America, South Africa, Portugal, Burma—that was about it.
- Q. Did you and Mr. Leir carry on the duties of procuring those raw materials for the French manufacturer?
 A. Interchangeably.
- Q. All right. How long did you remain with the S. A. des Minerais as an associate of Mr. Leir?
- A. Well, practically, it ended only when the war started. [827] I happened to be in France at the time, at the plant where we produced these ferro alloys, so I did not go back to Luxembourg, of course.

- Q. You date the war as of September of 1939?
- A. September, 1939.
- Q. Then what did you do?
- A. Well, I stayed at the plant to—we had to organize on a war footing, and after that was done I volunteered for the French Army.
 - Q. And you served in the French Army?
 - A. That's right.
 - Q. Until the fall of France?
- A. Until June, 1940, when the army was more or less disbanded.
- Q. Then what did you do; what experience did you have after that?
- A. Well, I didn't have any experience; I caught the last ship to North Africa.
 - Q. And after that, sir?
- A. After that I tried desperately to get out of North Africa and finally succeeded to get to Portugal on a fishing boat, and once in Portugal Mr. Leir got me out of there and I came here.
- Q. Mr. Leir got you out of Portugal to come to America? A. That's right.
 - Q. When did you arrive here? [828]
 - A. In September, '40.
- Q. Now, when did you actually go to work for the Continental Ore Company, in America, that is?
- A. Well, let me put it this way. I had a transient visa only, and I wanted to regularize my position. So, after a few months here, I went to Cuba to wait for the issuance of an immigration visa.

- Q. Was that immigration visa issued to you by the United States Government?
 - A. Yes, it was, the day after Pearl Harbor.
- Q. When did you make your regular—when did you make your permanent entry, as it is sometimes called, into the United States?
- A. The next ship was somewhere around December 16 of 1941, and I arrived here around December 22-23, 1941.
- Q. When did you go to work for the Continental Ore Company?

 A. On January 2, 1942.
- Q. Then what position did you occupy with the Continental Ore Company, beginning January of 1942?

 A. Call it general factorum.
- Q. General factorum. What did you do, specifically?
- A. Well, it was the same kind of occupation as I had before, trying to buy and sell materials, which were in our line.
- Q. Now at that time, at the time you started working for the Continental Ore Company, it had some kind of a joint [829] operating arrangement with the Apex Smelting Company of Chicago, did it not?

 A. That is correct.

Mr. Alioto: Does your Honor want to take a recess at this time?

(Short recess taken.) [829-A]

Q. (By Mr. Alioto): At the recess, Mr. Wolf, we were speaking of the joint arrangement between the Continental Ore Company and the Apex Smelting Company. After you became employed

with the Continental Ore Company, did you visit the plant of the Apex Smelting Company?

- A. Yes, several times.
- Q. And, of course, you had been in the French plant, had you not, prior to that time?
 - A. Yes.
- Q. You helped to get ready, in connection with this war situation, you testified? A. Right.
- Q. Will you generally describe the manner or the method of manufacture at the Apex plant? Just tell us what you saw and what was being done there.
- A. Well, the raw material, the vanadic oxide was, if necessary, put through a crusher and then was blended with the other ingredients, mainly aluminum shot—that means small pieces of aluminum -- and then put into a crucible to be ignited then with a small charge of magnesium. The crucible was a very crude instrument, actually. It consisted of half rings of refractory material which were stacked on top of each other to form a pot, and the materials with the aluminum, as I said, were put in, and then, since magnesium ignites easier than aluminum, the little charge of magnesium [830] was ignited, and because of the heat that was generated, the aluminum throughout the charge started to ignite and cause the smelting of the entire charge. Then the slag and the allow were drawn off separately from the crucible and then suitably crushed.
 - Q. Was this a method that the French firm had

(Testimony of Martin Wolf.) employed in connection with your joint arrange-

ment there?

A. Yes, except that the French plant also used electric furnaces. They used both methods, the alu-

minum thermic and the electro smelting.

Q. How did the product of the Apex method compare with the product of the French method or the French manufacture?

A. The quality?

Q. Yes.

A. Well, it was the same quality. It was made according to the same recipe, I should say.

Q. At the time you were at Apex, how many other manufacturers of vanadium were there in the country?

A. Two, Union Carbide and Vanadium Corporation of America.

Q. The two defendants here were the only other ones?A. That is right.

Q. Do you know from your experience in the industry what the vanadium content of the ferrovanadium manufactured by the defendants was?

A. Yes, it was in the neighborhood of 45 to 55 per cent of metallic vanadium in alloy. [831]

Q. In the European manufacture, what was the vanadium content of the ferro-vanadium manufactured under your joint arrangement with Freddie Coleman?

A. Seventy to eighty percent.

Q. What was the vanadium content used in the Apex process?

A. Seventy to eighty.

- Q. In other words, you used the European formula? A. That is right.
- Q. Incidentally, do you know what the vanadium content of the defendants' is today?
 - A. Well, they copied ours.
 - Q. Is it seventy to eighty now?
 - A. That is right.
 - Q. It has been for some time?
 - A. Yes, a number of years.
- Q. What are the relative advantages of a ferrovanadium with a 70 to 80 content as against a ferrovanadium with a 45 to 55 content or a 35 to 50 content?
 - A. Well, that is actually our sales talk.

The Court: I can't hear you.

The Witness: That is actually what we show the customers to be the advantage.

- Q. (By Mr. Alioto): Will you tell us what those advantages are? [832] Just state the facts with respect to those advantages.
- A. The advantage was mainly that our ferrovanadium content, with the same impurities quantity-wise as the ferro-vanadium made by our competitors which was much lower in grade, or rather, lower in vanadium, so that if you had, let us say, 10% impurities in theirs and in ours, since you only used half of ours to achieve the same result, you only added half of the impurities. That was the big advantage.

Then there were incidental advantages, such as you have to handle half of the material only and

you save freight, you save storage, and you generally have a purer material.

- Q. About how long a period of time, if you recall, had the 70 to 80 V contained material been used in Europe?
- A. I think there again we started it but I can't remember too sure on that.
- Q. Do you know how long the American companies, these defendants, have been manufacturing vanadium of that higher content, ferro-vanadium of that higher content, just approximately?
 - A. It is a guess; probably eight or ten years.

The Court: When?

The Witness: About eight or ten years, I would guess that they have been making it.

The Court: Just a moment. How is that material? [833] This suit was filed in 1948, wasn't it?

Mr. Alioto: The suit was filed in July of 1949, if your Honor please.

The Court: I don't see how anything occurred since then would be material.

Mr. Alioto: Except to show that there was nothing wrong with the ferro-vanadium that they made. If it has been copied since, that would indicate it was pretty good ferro-vanadium.

- Q. In any event, Mr. Wolf, your basic job in 1942 was to sell the Apex production, was it not?
 - A. One of them.
- Q. Who were the customers that you approached in connection with the sale of the ferro-vanadium produced by Apex?

- A. The users of ferro-alloys, which is the steel industry.
- Q. I show you, Mr. Wolf, a copy of a document that has previously been supplied to counsel and ask you if you will be good enough to look at it, sir, then state whether or not that is a document reflecting the sales of ferro-vanadium and other vanadium products by date, quantity, quality, price and customer.
 - A. Yes, it is.
- Q. And these were sales by the Continental Ore Company or the Apex Smelting Company?
 - A. That is right.
- Mr. Alioto: We will offer that in evidence, if [834] your Honor please, as plaintiff's exhibit next in order.
- Mr. Archer: Your Honor, may I ask a question on voir dire?
 - Q. Mr. Wolf, did you prepare this exhibit?
 - A. No.
 - Q. Do you know who prepared it?
 - A. Someone in the Continental Ore Company.
 - Q. Do you know that it is correct?
- A. I am sure it must be correct because it must be taken from their books.
 - Q. So it is all your sales?
 - A. I beg your pardon?
 - Q. It is all your sales?
- A. I don't know. I can't tell you that. I don't know what the period is exactly.

Q. I mean of your vanadium sales. Does that have all the vanadium sales?

Mr. Alioto: It is the sales up to a certain period of time, 1944.

Q. (By Mr. Archer): Does it have all the sales up to 1944?

Mr. Alioto: We are going to have a fuller documentation by the controller of the company on all of the sales, but then this reveals the customers and the dates of sales. That is the thing I am offering it for at this point. [835]

The Court: What are the dates included in this? Mr. Alioto: The dates included in this compilation are 1940 to 1944.

Mr. Archer: My only question is whether this is supposed to be all the sales during that period of time or not.

Mr. Alioto: We are going to have, as I say, a fuller documentation. I do not know whether every single sale is included, if your Honor please. It is not offered for that. It is offered to show the dates on which specific sales were made, the customers to whom sold, and the prices at which sold.

Mr. Archer: I have no objection.

Mr. Alioto: We will offer it in evidence. We will have another statement on all the sales when the controller takes the stand or Mr. Leir takes the stand.

(The document referred to was thereupon received in evidence as Plaintiff's Exhibit 79.)

[See Book of Exhibits.]

Mr. Alioto: I just want generally to point out the nature of this document to the jury.

The Court: Just state what it covers.

Mr. Alioto: Yes. This covers the date of the sale, the quantity of the sale, the material, whether it is vanadic acid or ferro-vanadium. It covers the price of the sale, the amount of the sale and the customer involved. The customers are Allegheny Ludlum Steel Corporation, the Braeburn Alloy Steel Corporation—— [836]

- Q. Will you identify that company?
- A. They are tool steel makers.
- Q. Where is Braeburn located?
- A. Braeburn, Pennsylvania. It isn't too far away from Pittsburgh.
- Q. There is Henry Disston & Sons, Incorporated.
- A. They are near Philadelphia. They make saws and files.
 - Q. The Jessop Steel Company.
 - A. They make special steels.
 - Q. Latrobe Steel Company.
- A. Tool steel near Pittsburgh.
- Q. Allegheny Ludlum we have already mentioned. The Omaha Steel Works?
 - A. They are not in existence anymore.
 - Q. Republic Steel Corporation.
- A. They make all kinds of steels, the third largest producer in the state.
- Q. *Simonds Saw and Steel Company. Do you identify that company? A.* Yes.

- Q. Where is it located? What is the nature of its business?
 - A. They make tools, small tools, workshop tools.
- Q. Universal Cyclops Steel Corporation and Valley Steel Casting Company, Vulcan Crucible Steel Company. [837]
 - A. Pittsburgh, all around Pittsburgh.
- Q. Mechanized Corporation, Aeron Casting Company and Atlas Steels. Will you tell us where Atlas Steels is located?
 - A. Welland, Ontario, Canada.

Mr. Alioto: We will have reference to this document at a later stage, if your Honor please.

- Q. Now, then, we had some testimony here, Mr. Wolf, in this courtroom about allocation systems that were in effect in 1941, 1942 and 1943. Would you just state the fact as to how those allocation systems worked in connection with customers such as these, for example?
- A. Well, the customers had to get permission from the authorities after they had put in an order to receive the material. It is about the same as we had to receive permission to get our raw materials into Apex or into our Long Island shop. The system worked so that the user had to apply and show the necessity for his receiving the material, but the first thing was that the orders were placed first on a commercial basis and then the authorities would approve or disapprove shipment.
 - Q. How, mechanically, did that affect your busi-

ness about going out and soliciting customers, whether new or old?

A. It did not.

- Q. You simply went out and offered your materials?
- A. If the customer did something that was considered [838] essential by the authorities, he would get the allocation.
- Q. So far as you were concerned, you made no applications to sell ferro-vanadium, did you?

Mr. Archer: I object to the question as leading. The Court: It is leading and suggestive.

Mr. Alioto: Just tell us the effect of this allocation system. State the facts so far as going out and getting customers.

A. I went out and sold these materials and it was up to the customers, then, to apply to the authorities to get permission to receive the materials. It did not in any way hinder us from making sales.

The Court: Just a moment. Let me understand that. You were not in the manufacturing business, were you?

The Witness: Yes, we were the agents for a manufacturer.

The Court: Were you acting in the nature of a broker or sales agent?

The Witness: We were also participants in the production and Apex. We had not only an arrangement whereby the profit was to be split between the French associates and ourselves, but we also had supplied Apex with the basic knowledge ac-

cording to which they produced. They were never in the business before.

The Court: You participated, then, in the manufacture? [839]

- A. I would say yes.
- Q. (By Mr. Alioto): Did you develop a customer in Canada known as the Atlas Steels Company?
 - Λ . Yes, we did.
- Q. Did you personally contact that company over the period of years? A. Yes.
- Q. When you were contacting these companies, did you sell them just vanadium alone?
- A. No, we sold them, or we tried to sell them, whatever other materials we had to offer at the time, mainly fluorspar. To this particular customer we sold both vanadium and fluorspar.

Mr. Alioto: Before going into the Atlas Steel story, I would like to read to the jury the type of customer this was.

The Court: Well, it was a customer in Canada.

Mr. Alioto: Yes, if your Honor please. I am not sure how substantial a customer it was.

Mr. Archer: Your Honor, I object to this. I filed a memorandum on it and I believe the Canadian situation should not be a part of this lawsuit.

Mr. Alioto: We will come to that in a moment. Just let me read these accounts and I will show to you the Canadian situation concerned meetings in New York City, not Canada. [840]

The Court: Now, just a moment. On this Canadian proposition I think that might be discussed

(Testimony of Martin Wolf.)
outside the presence of the jury. You are offering
evidence now—

Mr. Alioto: Just that we had the customers, that is all.

The Court: He had a customer up there?

Mr. Alioto: That is all at the moment.

The Court: Go ahead. We will come to that later.

Mr. Alioto: This customer on March 3, 1942, purchased Van-Ex, 2,000 pounds of Van-Ex at \$2.40, \$4,800.

March 13, 1942, 3,000 pounds of Van-Ex, the price always \$2.40, \$7,200.

March 27, 1942, \$12,000.

April 17, 1942, \$12,000.

May 16, 1942, \$12,000.

May 21, 1942, \$7,000.

June 4, 1942, \$6,900.

June 17, 1942, \$11,196.

July 3, 1942, \$12,804.

July 11, 1942, \$10,008.

August 17, 1942, \$7,200.

August 23, 1942, \$15,876.

September 17, 1942, \$5,184.

September 26, 1942, \$4,608. [841]

October 12, 1942, \$7,200.

November 11, 1942, \$5,184.

December 15, 1942, \$5,472.

December 17, 1942, \$6,336.

January 1, 1943, \$576.

May 29, 1944, \$3,240.

Q. Mr. Wolf, did there come a time when you no longer shipped to the Atlas Steel Company?

A. Yes.

Mr. Archer: Your Honor, I would like to renew my objection at this point.

Mr. Alioto: I have not said anything yet, if your Honor please.

The Court: Go ahead.

Q. (By Mr. Alioto): In connection with the matter of the Atlas Steel Company, I show you copy of a letter written to Mr. G. B. Walker of the Electro Metallurgical Company—that is this defendant, if your Honor please, not the Canadian company, this defendant—dated January 19, 1943. I show you this letter and ask you whether you can identify it as a letter sent to Mr. Walker on or about the date which the letter bears.

A. Yes.

Q. Did you help in the composition of that letter? A. Yes. [842]

Mr. Alioto: Are you familiar with the letter, counsel?

Mr. Archer: I will have to look at it.

Mr. Alioto: We are not offering this letter at the moment against Vanadium Corporation of America, only against the Union Carbide group of defendants.

Mr. Archer: Your Honor, I think that this is a matter to which you referred that we should discuss in chambers, and I object to the admission of the letter. The fact that he writes to somebody

at the Metallurgical Company in the United States does not change the situation as to what was occurring in Canada.

Mr. Alioto: No, but they answered from the United States and there was a conference held in New York in the United States about the matter.

The Court: Where was that held?

Mr. Alioto: Where was that held?

The Court: Where was the order made, in Canada or in the United States?

Mr. Alioto: The order was made in the United States for shipment to Canada.

The Court: Are you contending that the Canadian Government was a party to this?

Mr. Alioto: No, we are not, if your Honor please. We are making no charge that the Canadian Government is a party to anything. Under no circumstances are we making that charge. [843] The parties to this thing are the Electro Metallurgical Company of New York City. That is who the party is.

Mr. Holland: This brings up the matter to which your Honor referred which you said you thought should be discussed in chambers, and I suggest that we do that right now.

Mr. Alioto: We are proceeding to show certain actions by Electro Metallurgical Company and a conversation as to the reason for the action with a representative, not of any Canadian company or the Canadian Government, but a representative of

the Electro Metallurgical Company in New York, about which there has been abundant evidence.

The Court: Let me see the letter.

(The document referred to was handed to the Court.)

Mr. Alioto: That is the first in a series of correspondence on the matter. [844]

The Court: All right, you introduce it in evidence. Exception allowed.

Mr. Alioto: Thank you, if your Honor please. Ask that it be marked as Plaintiffs' Exhibit next in order.

The Clerk: Plaintiffs' Exhibit 80 admitted and filed in evidence.

(Reporter's Note: Exhibit 80 subsequently in these proceedings stricken from evidence and marked Exhibit 80 for identification.)

(Copy of letter from Henry J. Leir, Continental Ore Company, dated January 19, 1943, to Mr. G. B. Walker, Electro Metallurgical Co., New York City, received in evidence and marked Plaintiffs' Exhibit 80.)

Mr. Alioto: January 19, 1943; this is from Mr. Henry J. Leir, Continental Ore Company, to Mr. G. B. Walker, Electro Metallurgical Company, 30 East 42nd Street, New York City.

"Dear Sir:

"Re: Vanadium for Canada.

"You undoubtedly know that the new allocation system in Canada resulted in our being eliminated from the Canadian market during the month of

January. (Our customer, Atlas Steels Ltd., requested 4000 lbs. for shipment from us during January which you dropped from the list and replaced by ferro vanadium [845] from your and Vanadium Corporation's production.)

"Atlas Steels Ltd. has now applied for 5000 pounds of vanadium to be received during February and they insist that they want to receive our material.

"Our attorney in Ottawa, Mr. Redmond Code, contacted Mr. Bateman today in order to find out whether these 5000 pounds from Continental Ore Company are included in your list for February.

"Mr. Bateman was unable to give him this information and suggested to Mr. Code that we get in touch with you regarding this matter since your Welland firm is handling this matter under your direction.

"We wish to say that we have these 5000 pounds of V ready for immediate shipment and expect you to let us ship this material to Canada as requested by our customer.

"We will telephone you tomorrow morning in order to learn your reply.

"Thank you for your cooperation.

"Very truly yours, Continental Ore Company, Henry J. Leir."

Mr. Holland: I would like to move to strike that letter. In the letter there is obviously hearsay. It is what the man in Canada told Mr. Code in Canada, who told Mr. Wolf.

(Testimony of Martin Wolf.)

Now, how could that possibly be binding on us, your [846] Honor?

Mr. Alioto: We will develop it, if your Honor please.

The Court: The objection will be sustained. You can't cover the entire earth now on this proposition.

Mr. Alioto: How about New York City, if your Honor please? May we cover that?

The Court: Well, if it is in New York City, yes, but we can't put New York in Canada.

Mr. Alioto: Is your Honor striking this letter (Exhibit 80)?

The Court: The letter will be stricken. Exception allowed. It is not material, and the Jury will not give it consideration.

Mr. Alioto: You mean an attempt in the United States to prevent them from shipping from the United States, if your Honor please, is not material to a Sherman Act violation? I find that difficult to understand.

The Court: How could an individual in the United States control the Government of Canada?

Mr. Alioto: I will show you in just a minute how, Judge, if you will let me.

The Court: No.

Mr. Alioto: I will show you how.

The Court: I am not going to let you do that because Canada is a different nation. Now, I don't care what kind of a rule Canada put into effect; it may have been a very unfair rule; it may have (Testimony of Martin Wolf.)

been to the disadvantage of this plaintiff. But if it is the rule of Canada, we have no jurisdiction of Canada.

Mr. Alioto: It isn't the rule of Canada, if your Honor please. I want to show it was the rule of this defendant in New York. In other words, it wasn't a statute, a Canadian statute, or a Canadian regulation that we are complaining about. What happened is that the Electro Metallurgical Company—

Mr. Archer: Your Honor, I think this should be in chambers. I think it has gone beyond that right now.

The Court: Very well. The Jury will be excused until 2:00 o'clock.

(Thereupon the Jury withdrew and the following proceedings were outside the presence of the Jury.)

Mr. Alioto: If your Honor please, I want first to indicate what facts will be developed through this witness and through correspondence. I want to emphasize preliminarily that the only correspondence we are going to be talking about is correspondence between this defendant, Electro Metallurgical Company, and this plaintiff, the Continental Ore Company. I am not concerned with any correspondence with Canadian people, Canadian ministers, or anybody else. I am concerned only with correspondence between this plaintiff and these defendants in [848] connection with the taking away of a very valuable customer.

Now, the customer we are speaking of is a customer in Canada, it is true, who receives shipments from the United States, produced in the United States, and shipped out of New York. That is all we are talking about. And I submit that obviously—

The Court: Now, who would control your Canadian company under your theory? Why don't you just go ahead and ship it?

Mr. Alioto: Well, I will explain why in just a moment, if your Honor please. Because the Electro Metallurgical Company of Canada was appointed as an agent by the Canadian Government, under a statute about which no question is being raised, and under an appointment about which no question is being raised, and was appointed as an agent to buy vanadium—that is what the agent was supposed to do.

Now, from there on in that agent moves into the position of a purchasing agent for the Canadian Government. There is no question about that government connection, no question at all about it. That agent has the right to buy vanadium. That agent determines, after conferences with this defendant in New York, and it is controlled by this defendant in New York, that agent, that—

The Court: Now you are assuming that an agent of the Government of Canada is controlled by somebody in the United States.

Mr. Alioto: I am not assuming. I am going to prove it.

The Court: Well, you are not going to be per-

mitted to prove it. Suppose it is wrong; suppose they did try to influence the sale of their goods.

Mr. Alioto: They didn't influence it-

The Court: But it was the act of the Canadian Government.

Mr. Alioto: My point is that they didn't influence it, if your Honor please; they didn't influence—they did it.

In other words, they made the determination—

The Court: I am not going to permit you to go into that because that would say that we controlled the Canadian Government.

Mr. Alioto: No.

The Court: That some individual down here controlled the Canadian Government.

Mr. Alioto: No, it doesn't say that at all, if your Honor please.

Let me invite your Honor's attention to a very recent case. It is the Fifth Circuit. I will get the citation in just a moment. Here was the charge. The charge was that a group of securities dealers went to the District Attorney down in Florida and got the District Attorney to indict another [850] securities dealer. So the District Attorney indicted him. Obviously the private persons couldn't have the indictment, it was the government, the government that indicted the securities dealer. He brought an anti-trust case in which he said that his competitors induced the District Attorney to indict him and ruin his business. Judge Hutchinson of the Fifth Circuit said that that stated a cause of action under the anti-trust laws.

Now, all we are alleging, just as in that case, and there are other cases—

The Court: You are alleging that one of these defendants, one of the agents of the defendants, influenced the representative in the Canadian Government to disregard your client and to permit the sale by someone else.

Mr. Alioto: Except that your Honor is missing one step, I think. That representative of the Canadian Government was the defendant. I don't think I made that clear.

In other words, the Canadian Government appointed—

The Court: Are you making the agent of the Canadian Government, this Canadian representative, a defendant—is he a defendant in this case?

Mr. Alioto: The representative there was the Metallurgical Sales Corporation of Canada. He was named as a defendant in this case.

The Court: He is a defendant in this case? [851]

Mr. Alioto: That's right.

The Court: Did you have service on him?

Mr. Alioto: No, we didn't serve him.

The Court: Well, then, you will not regard him as a defendant in this case.

Mr. Alioto: Just a minute, if your Honor please. What I want to prove is that when inquiry was made there in Canada, they said: See the man in New York, Electro Metallurgical Company, which is a defendant in this case.

The Court: It doesn't matter what they did, so

long as it was the act of a representative of the Canadian Government.

Mr. Alioto: What about the District Attorney in the Florida case?

The Court: It doesn't matter; I don't care anything about that case.

Mr. Alioto: You don't care anything about that case?

The Court: No.

Mr. Alioto: What about the-

The Court: The Supreme Court doesn't have it yet, has it?

Mr. Alioto: Well, I thought that perhaps your Honor would care less for it if it got to the Supreme Court.

The Court: We still don't know what might happen [852] to it.

But suppose that they did induce the representative up there. The final act was the act of the Canadian Government. Now, we don't have any jurisdiction in Canada and we can't control—we can't say that what the Canadian Government did was right or wrong. We accept it as it is. Certainly I will not permit you to try to prove now that a representative of the Canadian Government was influenced by one of his associates, you might say, in the United States, to do what it did.

Mr. Alioto: By his boss in the United States, to cut off Continental.

Now, here's what I want to prove, if your Honor please. Your Honor is familiar with those lines of eases which say that in carrying out or putting into operation an illegal plan that it may be that some of the steps in the plan are in themselves legal—in themselves legal.

Now, our basic point is-

The Court: Well, we'll say now that that would be your conspiracy.

Mr. Alioto: Yes.

The Court: But the overt act was committed in Canada.

Mr. Alioto: Oh, no. In New York City, is where the overt act was committed. And the crush on production was in New York City, not up in Canada. The prevention of the shipment [853] was in New York City.

The Court: Well, I am not going to permit you to go into that situation.

Mr. Alioto: Let me state further a further domestic involvement that I think perhaps will appeal to your Honor. When they were directed in Canada to go see the boys at 30 East 42nd Street, which is New York City, which is not under the Canadian Government, as I understand it, they went to them. They wrote them a letter, first of all, and said: We have been referred to you. What's the idea of stopping this shipment?

Then a man named Arrouet calls them up. Mr. Arrouet is a highly placed employee of that company, who spent a good deal of his time in Europe working out their relations with the European cartels. Now, he's a cartelist. He is cartel minded.

So, the upshot of the whole thing is that in June of 1943 this witness (Mr. Wolf) in a meeting in

New York City, which is not under the jurisdiction of the Canadian Government, as I understand it, had a conference with Mr. Arrouet about trying to straighten out this Canadian deal where they had lost this very valuable customer, as your Honor just heard. Your Honor just heard how valuable that customer was.

At this conference Mr. Arrouet tells Mr. Wolf: You people have no business in the vanadium business. You ought [854] to get out of the vanadium business. You have no place in it. And furthermore, if you don't quit fooling around with the Climax Molybdenum Company, we'll take care of them, too.

They were trying to get Climax Molybdenum to manufacture ferro vanadium for them.

Now, it just is incredible to me that that type of evidence can be excluded in a Sherman Act case, Judge.

The Court: Whom did Arrouet represent?

Mr. Alioto: The Electro Metallurgical Company, the principal defendant in this case, the principal defendant in this case, Judge. It is just incredible that you won't let us put that in.

The Court: That's his individual view, that is his opinion about it.

Mr. Alioto: Well, how else can we get a corporate view except through an individual, if your Honor please? If there is—

The Court: If you can find out what the corporate action was.

Mr. Alioto: If there is anything clearer—perhaps we don't like some of these Supreme Court decisions—if there is anything clearer in the books, it is the fact that you don't have to spread a conspiracy on your minutes, that you don't have to put it there, Judge; that's just as clear as anything can be, and I would be amazed if any [855] conspirator put on the corporate minutes that "I have just told the Continental Ore Company that they can't go into business"—I would be amazed at that, if your Honor please, and I think your Honor would be amazed at it, too.

The Court: But the effect of your contention is that the Canadian Government, through its representative, was influenced to do what it did by one of these defendants.

Mr. Alioto: The crux of my contention is—it comes down to this, that this defendant as an agent for the Canadian Government, used that agency for the purpose of restraining trade and participating in a conspiracy to eliminate the Continental Ore Company from the Canadian market.

The Court: Notwithstanding, it was acting under the orders of the Canadian Government.

Mr. Alioto: It wasn't acting under the orders of the Canadian Government. That's the whole point. It was purchasing under an agency.

Now, let me give this example, if your Honor please. Let's assume that a policeman is authorized by the State of California to carry a gun in order to protect the peace, the public peace. He uses that gun for the purpose of participating in a conspiracy to commit murder. Would the fact of his agency insulate him from the charge that he had partici-

pated in that conspiracy? That's all we had here.

The Court: The representative now is getting into this situation in Canada. He was made the purchasing agent by the Canadian Government.

Mr. Alioto: Yes.

The Court: Now, he acted. Now, your contention that his action was influenced by the defendant in the United States—

Mr. Alioto: I am saying that the motive and intent of his action was to carry out a conspiracy to restrain the trade of this plaintiff.

Now, if that is done-

The Court: It would be in the nature of this court reviewing an act of the Canadian Government.

Mr. Alioto: No.

The Court: We are not going into that.

Mr. Alioto: Let me ask, if your Honor will let me go into that conversation with Mr. Arrouet, where he says that these people don't belong in the business, they've got to get out of it, and that's why they are not going to ship to Canada, may I get that in?

The Court: No.

Mr. Alioto: It would be just incredible that I couldn't put that in.

The Court: No, I can't allow you to put that in.

Mr. Alioto: You will not?

The Court: No. [857]

Mr. Alioto: Okay. Well, I guess it is clear what the Court is determined to do here under the circumstances. The Court: Well, I want to keep out of Canada, that's it.

Mr. Alioto: Now, then, that conversation in New York—I will stay out of Canada and go right to New York, 30 East 42nd Street, where these people lived, Judge, that is where I am going to go. Now I want to know what your Honor's view is so that I won't waste any further time on it; in this conversation, Mr. Arrouet, who was an important employee of this company, tells them that they ought to get out of the vanadium business, they have no business in it.

He further tells them that he is going to make trouble for Climax Molybdenum if they try to deal with Climax Molybdenum to make ferro vanadium for them. I think it is in the same category as the evidence of Vanadium Corporation carrying on their little by-play with Apex Smelting that we already had.

Now, I submit-

The Court: I will permit you to make—you can make your offer of proof now, you can make your record on this, but the Court is very definite in his judgment that we should stay out of Canada and that is an act of the Canadian Government and certainly isn't binding on any of the defendants.

Mr. Alioto: Your Honor understands that the Climax Molybdenum Company is not in Canada?

The Court: I am not talking about that now. I am talking about this Canadian transaction.

Mr. Alioto: Well, this is involved in the Cana-

dian transaction, as part of the conversation that takes place with Mr. Arrouet, Judge.

The Court: The Court ruled.

Mr. Alioto: All right. If your Honor please, just let me make a record on it while we are here, we have time before noon. I will make a detailed record on it, if I may.

The Court has already stricken, as I understand, Exhibit 80, which is a letter to somebody in New York—somebody else in New York.

We offer at this time, and your Honor please, follow-up correspondence to that, which is a letter dated January 29, 1943, from Mr. Henry J. Leir to Mr. M. D. Arrouet of the Electro Metallurgical Company, 30 East 42nd Street, New York City. It is from a man in New York to another man in New York on the subject matter of shipping vanadium from the United States of America to Canada, and on the other subject matter suppressing that shipment of vanadium from the United States of America to Canada.

We will offer that to prove that this defendant at this point was engaged in restraining the plaintiff's vanadium trade, as well as its United States trade. [859]

Does your Honor want to rule on that now? The Court: Go ahead and make your offer.

Mr. Alioto: Do you want me to complete the offer?

We next offer in evidence a letter dated February 10, 1943, from the Electro Metallurgical Company of Canada, Limited, to the Continental

Ore Company, which states, among other things, that it is acting as the result of a reference made to it by the Electro Metallurgical Company of New York City, this defendant in the action. This is dated February 10, 1943, if your Honor please. We will offer this in evidence as our next exhibit in order.

We will offer as our next exhibit after that a letter dated February 11, 1943, from Henry J. Leir, Continental Ore Company, to the Electro Metallurgical Company of Canada, Limited, Welland, Ontario, Canada, addressed to its vice-president, Mr. C. S. Bravin.

We offer next into evidence a letter from C. S. Bravin of the Electro Metallurgical Company of Canada, Limited, to Henry J. Leir, in reference to the same matter.

Now, Mr. Archer, at this point, so there won't be any question about it, I take it, it will be stipulated that the Electro Metallurgical Sales Company of Canada was in 1943 a wholly owned subsidiary of the Union Carbide and Carbon Corporation.

Mr. Archer: That's correct, as agent for the Metals Control of Canada.

Mr. Alioto: Thank you, Mr. Archer.

Mr. Archer: I think you have the names there wrong.

Mr. Alioto: Well, here's the name, right on the letterhead, the last one I gave you. It is the Electro Metallurgical Company of Canada, Limited, of Welland, Ontario, and it is stipulated, I take it, that

throughout the period of the year of 1943 this company was a wholly owned subsidiary of the Union Carbide and Carbon Corporation. [861]

Mr. Archer: Yes. One other thing with regard to this offer. I think it should be noted that Electro Metallurgical Sales of New York was never served in this action, either.

Mr. Alioto: The next is a letter, if your Honor please, dated February 17, 1943, from Mr. C. S. Bravin of the Electro Metallurgical Company of Canada, to the Continental Ore Company.

(The document referred to was thereupon marked Plaintiffs' Exhibit No. 84 for identification.)

Mr. Alioto: This is a telegram from Continental Ore Company to C. S. Bravin, Electro Metallurgical Company of Canada, dated February 18, 1943.

(The telegram referred to was thereupon marked Plaintiffs' Exhibit No. 85 for identification.)

Mr. Aliotoc The next is a letter dated February 23, 1943, from C. S. Bravin of the Electro Metallurgical Company of Canada to the Continental Ore Company.

(The letter referred to was thereupon marked Plaintiffs' Exhibit No. 86 for identification.)

Mr. Alioto: The next is a telegram dated March 1st, from Continental Ore Company to C. S. Bravin.

(The telegram was thereupon marked Plaintiffs' Exhibit No. 87 for identification.)

Mr. Alioto: The next is a letter of March 3rd,

1943, from Henry J. Leir to Electro Metallurgical Company [862] of Canada, Ltd.

(The document referred to was marked Plaintiffs' Exhibit No. 88 for identification.)

Mr. Alioto: The next is a letter from Continental Ore Company to Electro Metallurgical Company of Canada, dated March the 10th, 1943.

(The document referred to was marked Plaintiffs' Exhibit No. 89 for identification.)

Mr. Alioto: The next is a telegram from Continental Ore Company to Mr. C. S. Bravin, Vice-President, Electro Metallurgical Company of Canada.

(The document referred to was marked Plaintiffs' Exhibit No. 90 for identification.)

Mr. Alioto: The next is a telegram from Electro Metallurgical Company, Bravin, to Continental Ore Corporation.

The next is a letter from Continental Ore Company to Office of the Metals Controller, Department of Munitions and Supply, dated April 26, 1943.

(The document referred to was marked Plaintiffs' Exhibit No. 91 for identification.)
(The document referred to was marked Plaintiffs' Exhibit No. 92 for identification.)

Mr. Alioto: The next is a letter from Mr. C. B. Dawson for G. C. Bateman, Metals Controller, to Continental Ore Company, dated April 29th, 1943.

(The document referred to was marked Plaintiffs' Exhibit No. 93 for identification.)
The next is a letter from Continental Ore Com-

pany to Electro Metallurgical Company of Canada, Ltd., dated May 4, 1943.

(Whereupon the document referred to was marked Plaintiff's Exhibit 94 for identification.)

The next is a letter from Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., dated May 17, 1943.

(Whereupon the document referred to was marked Plaintiff's Exhibit 95 for identification.)

The next is a letter from Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., dated May 20, 1943.

(Whereupon the document referred to was marked Plaintiff's Exhibit 96 for identification.)

The next is a letter from Electro Metallurgical Company of Canada, Ltd., to Continental Ore Company, dated June 1, 1943, to the attention of Mr. M. Wolf.

(Whereupon the document referred to was marked Plaintiff's Exhibit 97 for identification.)

The next is a telegram from Continental Ore Company to Mr. W. Lathrop, Metallurgical Engineer, Electro Metallurgical Company of Canada, Ltd., dated June 1, 1943.

(Whereupon the document referred to was marked Plaintiff's Exhibit 98 for identification.) [864]

The next is a letter dated June 29, 1943, between

the Continental Ore Company and Electro Metallurgical Sales Company of Canada.

(Whereupon the document referred to was marked Plaintiff's Exhibit 99 for identification.)

The next is a letter dated July 5, 1943, between Mr. C. S. Brovin, Vice-President of Electro Metallurgical Company of Canada, Ltd., to Continental Ore Company.

(Whereupon the document referred to was marked Plaintiff's Exhibit 100 for identification.)

The next is a letter from Continental Ore Company, Henry J. Leir, to Electro Metallurgical Company of Canada, Ltd., Attention, Mr. C. S. Brovin, Vice-President, on the subject of Van-Ex for Atlas Sales Limited.

(Whereupon the document referred to was marked Plaintiff's Exhibit 101 for identification.)

The next is an original letter from Mr. Brovin dated August 2, 1943, Mr. Brovin being the Vice-President of Electro Metallurgical Company of Canada, Ltd., to Continental Ore Company.

(Whereupon the document referred to was marked Plaintiff's Exhibit 102 for identification.)

The Court: Pardon me just one moment. The defendants actually served in this case were the Union Carbide & Carbon Company and the Vanadium Corporation of America. [865] Was the Electro Metallurgical Company served?

Mr. Alioto: No, if your Honor please. During a period of time right around the lawsuit, the Electro Metallurgical Sales Company was merged into the Union Carbide. I think that was in 1948 or 1949. The Electro Metallurgical Company became a division of Union Carbide.

The Court: I understand.

Mr. Aloto: It was never served.

The Court: But it was never served.

Mr. Alioto: No.

Mr. Archer: The two defendants who were served were the Union Carbide & Carbon Corporation, which is now known as the Union Carbide Corporation, and United States Vanadium Corporation, which was Mr. Burwell's company.

The Court: The United States Vanadium Corporation was served?

Mr. Archer: Yes, your Honor.

The Court: And then the Vanadium Company of America.

Mr. Holland: That is right.

Mr. Alioto: Mr. Archer, can we agree that the Electro Metallurgical Company and the Electro Metallurgical Sales Company were merged or were taken into the Union Carbide & Carbon Corporation?

Mr. Archer: I do not know what the fact is. I [866] think it is in our answer.

Mr. Alioto: That is part of the admissions here, if your Honor please, that these companies were merged.

Mr. Archer: I think it was merged after the lawsuit, though, wasn't it?

Mr. Alioto: I do not know when it was merged. In March of 1949, these companies were merged into the Union Carbide & Carbon Corporation.

Mr. Archer: I think there was actually a dissolution.

Mr. Alioto: All right, it was dissolved.

The Court: You mean the Electro Metallurgical Company was dissolved?

Mr. Archer: Yes, your Honor.

Mr. Alioto: What is the date, Mr. Archer? March of 1949?

Mr. Archer: I will have to look at my notes. I don't carry that in my head.

Mr. Alioto: Will you be good enough to do that? I will be here for a little while. Does your Honor want to excuse the jury? It is past 12:00 o'clock, I notice. Oh, I understand they have already been excused. While you are getting that, Mr. Archer, I will go ahead.

We offer next, if your Honor please, a letter dated September 23, 1943, from the Continental Ore Company to the [867] Electro Metallurgical Company of Canada, Ltd.

(Whereupon the document referred to was marked Plaintiff's Exhibit 103 for identification.)

A letter dated October 4, 1943, from Mr. Brovin, the vice-president of Electro Metallurgical Company of Canada, to Mr. Henry J. Leir, the president of the Continental Ore Company.

(Whereupon the document referred to was marked Plaintiff's Exhibit 104 for identification.)

Next a letter from Mr. Henry J. Leir to the Electro Metallurgical Company of Canada dated October 5, 1943.

(Whereupon the letter referred to was marked Plaintiff's Exhibit 105 for identification.)

We offer next under date of October 27, 1943, a letter from the Continental Ore Company to the Electro Metallurgical Company of Canada, Ltd.

(Whereupon the letter referred to was marked Plaintiff's Exhibit 106 for identification.)

Next is a letter dated October 30, 1943, from the Electro Metallurgical Company of Canada, Ltd., to the Continental Ore Company, 500 Fifth Avenue, New York City.

(Whereupon the letter referred to was marked Plaintiff's Exhibit 107 for identification.)

We offer finally a letter dated February 2, 1944, from Mr. Henry J. Leir to the Electro Metallurgical Company of Canada, and by way of a carbon copy to Mr. George B. Walker [868] of the Electro Metallurgical Company, 30 East 42nd Street, New York, New York.

(Whereupon the document referred to was marked Plaintiff's Exhibit 108 for identification.)

Now, if your Honor please, we offer through this

witness to prove the following facts, that at the end of 1942 and 1943 the Electro Metallurgical Company of Canada, which had been appointed as the purchasing agent by an agency of the Canadian Government, that is, the purchasing agent for vanadium, determined that it would not permit any further shipments from the Continental Ore Company into the Canadian market. In that connection we offer to prove that he was acting under instructions from the officials of Union Carbide or its affiliates in order to eliminate the plaintiff from the Canadian market.

The Court: Just a moment.

Mr. Alioto: Yes, Judge.

The Court: You are going to prove by him now. What does he know about it?

Mr. Alioto: He had a conference with Mr. Arrouet and he made it very plain what the situation was.

The Court: Mr. Arrouet was not connected with the Union Carbide, was he?

Mr. Alioto: Oh, yes, he was, Judge. I thought I had made that rather clear. He had been a confidential [869] agent for them in connection with their dealings on the Continent with the European cartel, a very important man in the organization.

The Court: He was not an officer of the corporation, was he?

Mr. Alioto: No, he was not an officer of the corporation, and he has not been made an officer of the corporation since this lawsuit was filed. He is a man, however, who commands a very high

salary, and he was a man who was entrusted-we shall further prove in this connection that Mr. Arrouet was a man who was entrusted by the Carbide organization with carrying on relations in collaboration with Mr. Sneath of the Carbide organization and with the European-Canadian cartel, and that he was a confidential agent in that he personally carried with him throughout Europe certain stock of the corporation evidencing ownership in various European plants. We tentatively offer to prove in any event that it was the Carbide officials and employees which directed their whollyowned and controlled subsidiary organization, the Electro Metallurgical Company of Canada, Ltd., to eliminate the plaintiff from the Canadian market, to take away his Canadian customers, and to supply those customers between the Vanadium Corporation of America and the Union Carbide.

We offer to prove in this connection that it was the intent and purpose of the Carbide officials and employees [870] to use the Canadian agency for the purpose of restraining the plaintiff's trade, and specifically for the purpose of carrying out the conspiracy to restrain and to monopolize the vanadium industry in the United States and Canada. He is one of the means in connection with that monopolization and restrain to eliminate the Continental Ore Company from the business. [871]

Mr. Alioto: Mr. Arrouet said further that the plaintiff, the Continental Ore Company, had no business in the vanadium business. Mr. Arrouet said further to the plaintiff that they had better

stay away from Climax and not try to make any arrangements with Climax, and they were then entering negotiation with them, as the offer of this evidence will tend to show.

Mr. Arrouet told them to stay away from Climax, and, if Climax got into the business, that Union Carbide would undertake a reprisal against the Climax Molybdenum Company.

He said, in that connection, that Union Carbide had available at its plant in California, its tungsten operation in California, quantities of molybdeum that they would use against the Climax Molybdenum Company if that company entered into negotiations with the plaintiff to manufacture ferrovanadium for the account of the plaintiff or under a joint operating arrangement with the plaintiff.

At that juncture this witness, we offer to prove, that this witness said, in substance or effect, "Does it mean, then, Mr. Arrouet, that the picture of the world is something like this: God told Electromet to make vanadium, tungsten, ferro-manganese, and God told Vanadium Corporation to make ferro-vanadium and that nobody else would be allowed into these fields?" To which the employee of Electromet Company and the Union Carbide affiliate answered: "That was [872] just about it." And "That's the way it was going to be."

We further offer to prove at this time that Mr. Arrouet then made an offer which involved giving the plaintiff a little business in the Canadian market if he promised to stay out of it thereafter.

That is the offer of proof, if your Honor please.

We offer to make that proof through the witness now on the stand.

The Court: Just a moment. Now, the Electro Metallurgical Company and the Electro Metallurgical Company of Canada were never served in this case, is that right?

Mr. Archer: That's correct, your Honor,

The Court: Now, when was the Electro Metallurgical Company dissolved?

Mr. Archer: The Electro Metallurgical Company was liquidated and its assets transferred to the Union Carbide & Carbon Corporation on November 30, 1948, and it was dissolved formally on January 5, 1949.

Mr. Alioto: Before the complaint was filed.

Mr. Archer: Just a minute. Electro Metallurgical Sales Corporation was merged with Union Carbide & Carbon Corporation March 14, 1949, and the Electro Metallurgical Company of Canada neither does business, maintains an office, nor can be found in San Francisco.

Mr. Alioto: What is the corporate status of the Electro Metallurgical Company of Canada, Mr. Archer? [873]

Mr. Archer: It is a wholly-owned subsidiary and it is a Canadian corporation.

Mr. Alioto: Wholly-owned subsidiary of what company?

Mr. Archer: Well, I don't know whether it is Electro Metallurgical Company——

Mr. Alioto: Ask Mr. Lyon on that.

Mr. Archer: He says, "I am not sure." I can

find that out for your Honor. It was never served in this action and I believe it is still in existence. Certainly it existed, it was in existence—

The Court: Now, the offer of proof is denied for the reason that this is a transaction wholly in the hands of the Canadian Government and that whether or not this plaintiff was permitted to sell his material to a customer in Canada was a matter wholly within the control of the Canadian Government.

Exception is allowed.

Mr. Alioto: May I supplement the offer, if your Honor please? We offer to prove at this point that the Canadian Government was totally oblivious to the purpose for which its agent, the Electro Metallurgical Company of Canada, made its decision not to deal with the plaintiff and to eliminate the plaintiff from the Canadian business.

The Court: I don't know how you can prove that. [874] That will be denied also.

Mr. Alioto: Now, your Honor, the Arrouet conversation covered matters in the United States as well as in Canada.

The Court: Yes, I understand.

Mr. Alioto: And your Honor is excluding the Arrouet conversation as well—

The Court: I am putting that letter out.

Mr. Alioto: No, the Arrouet matter is a conversation. It is a conversation, not a letter, if your Honor please.

Mr. Holland: If the Court please, I think Mr. Alioto is trying to tie in some conversations to the

Canadian situation, and as I understand your Honor's ruling, it applies only to the extent that these conversations involved Canada. I think there may be other considerations if there were conversations that involved business in the United States only.

Mr. Alioto: I appreciate Mr. Holland associating with me in this argument.

Mr. Holland: Well, I don't mean that.

Mr. Alioto: I am more than happy to have it, Joe.

Mr. Holland: I think it should be kept separate, the Canadian—

Mr. Alioto: How can you separate it?

The Court: You are offering this letter in support of your contention that the Canadian Government, through its [875] representative, was influenced by an agent for the defendant corporation to do what it did. My ruling goes to this point, that we cannot review a decision by the Canadian Government; it is not within the jurisdiction of this Court. It is not within the jurisdiction of the United States; it is a separate nation.

Now, as to any conversations that dealt with other matters, there might be portions of the conversation that would be competent in your general case, but not so far as applied to Canada.

Mr. Alioto: Well, my offer to prove is just as I have stated it, if your Honor please. He held the conversation with Mr. Arrouet to find out if he could break this log jam in connection with shipments to Canada and during that conversation Mr.

Arrouet said, in substance or effect, that we have no business in the vanadium business anywhere, in the United States or Canada. In other words, he covered both territories. I don't know how you can separate the situation.

The Court: We will see about that later. It nfight be that part of that would be competent, but all that had to do with Canada—all in connection with the Canadian deal, that is what the Court is ruling on now, that that is separate and distinct.

Mr. Alioto: Climax had, of course, nothing to do with the Canadian transaction except that it might be a supplier [876] for Canada. It might be a supplier for Canada. But, specifically, we offer to prove as well, if your Honor please, that the agency was used for the purpose of furthering the monopolization and the conspiracy to eliminate the plaintiff from the business. That's basically what our offer of proof comes down to.

The Court: Same ruling.

A.

Mr. Alioto: All right. Now, I understand, without infringing upon the Court's ruling, I may inquire about this Arrouet conversation which admittedly came up in connection with the Canadian matters?

The Court: Well, you can't refer to the Canadian part of it, if you do. I don't know how you can—

Mr. Alioto: We will do the best we can. We will do the best we can. It's pretty hard to cut conversations, but we will do the best we can.

The Court: Any reference made to the Cana-

dian proposition. That's a matter of the Canadian Government.

Mr. Alioto: One final document we offer in evidence, if your Honor please; we offer it as a memorandum made by this witness on June 11, 1943, recording his conversation with Mr. Arrouet, which had taken place very shortly before June 11, 1943.

Mr. Holland: May I see it?

Mr. Alioto: Yes. [877]

So the record may be clear, if your Honor please, I would like each of the letters submitted to be marked for identification, there being no way of tying them in otherwise.

The Court: Very well.

Mr. Alioto: Thank you very much.

The Clerk: Plaintiff's Exhibits 80 through 109 marked for identification.

(Thereupon marked for identification, Exhibit 80 (heretofore marked), copy of letter January 19, 1943, Henry J. Leir to C. B. Walker, Electro Metallurgical Company, New York City; as Plaintiff's 81 for identification copy of letter from Leir to M. D. Arrouet, New York; Plaintiff's 82 for identification, letter 2/10/43, Electro Metallurgical Co. of Canada to Continental Ore.) [878]

(Whereupon, copy of letter dated 2/11/43, Continental Ore Company, Henry J. Leir, to Electro Metallurgical Company of Canada, Ltd., was marked as Plaintiff's Exhibit 83 for identification.)

(Whereupon, copy of letter dated 2/17/43,

Electro Metallurgical Company of Canada, Ltd., to Continental Ore Company, was marked as Plaintiff's Exhibit 84 for identification.)

(Whereupon, copy of telegram, Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., was marked as Plaintiff's Exhibit 85 for identification.)

(Whereupon, copy of letter dated 2/23/43, Electro Metallurgical Company of Canada, Ltd., to Continental Ore Company, was marked Plaintiff's Exhibit 86 for identification.)

(Whereupon, copy of telegram dated 3/1/43, Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., was marked Plaintiff's Exhibit 87 for identification.)

(Whereupon, copy of letter dated 3/3/43, Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., was marked as Plaintiff's Exhibit 88 for identification.)

(Whereupon, copy of letter dated 3/10/43, Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., was marked as Plaintiff's Exhibit 89 for identification.)

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(Whereupon, copy of wire dated 3/19/43, Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., was marked as Plaintiff's Exhibit 90 for identification.)

(Whereupon, telegram from Electro Metallurgical Company of Canada, Ltd., to Continental Ore Corporation, was marked Plaintiff's Exhibit 91 for identification.) [879] (Whereupon, copy of letter dated 4/26/43,

Continental Ore Company to Office of Metals Comptroller, Ottawa, Ontario, Canada, was marked as Plaintiff's Exhibit 92 for identification.)

(Whereupon, letter dated 4/29/43, Office of Metals Comptroller, Department of Munitions & Supply, Ottawa, Canada, to Continental Ore Corporation, was marked Plaintiff's Exhibit 93 for identification.)

(Whereupon, copy of letter dated 5/4/43, Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., was marked Plaintiff's Exhibit 94 for identification.)

(Whereupon, copy of letter dated 5/17/43, Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., was marked Plaintiff's Exhibit 95 for identification.)

(Whereupon, copy of letter dated 5/20/43, Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., was marked Plaintiff's Exhibit 96 for identification.)

(Whereupon, letter dated 6/1/43, Electro Metallurgical Company of Canada, Ltd., to Continental Ore Company, was marked Plaintiff's Exhibit 97 for identification.)

(Whereupon, copy of telegram dated 6/1/43, Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., was marked Plaintiff's Exhibit 98 for identification.)

(Whereupon, copy of letter from Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., dated 6/29/43, was marked Plaintiff's Exhibit 99 for identification.) [880]

(Whereupon, letter from Electro Metallurgical Company of Canada, Ltd., to Continental Ore Company, dated 7/5/43, was marked Plaintiff's Exhibit 100 for identification.)

(Whereupon, copy of letter from Continental Ore Company to Electro Metallurgical Company of Canada, Ltd., dated 7/30/43, was marked Plaintiff's Exhibit 101 for identification.)

(Whereupon, letter from Electro Metallurgical Company of Canada, Ltd., to Continental Ore Company, dated 8/2/43, was marked Plaintiff's Exhibit 102 for identification.)

(Whereupon, copy of letter from Continental Ore to Electro Metallurgical Company of Canada, Ltd., dated 9/23/43, was marked Plaintiff's Exhibit 103 for identification.)

(Whereupon, copy of letter from Electro Metallurgical Company of Canada, Ltd., to Continental Ore Company, dated 10/4/43, was marked Plaintiff's Exhibit 104 for identification.)

(Whereupon, copy of letter from Continental Ore to Electro Metallurgical Company of Canada, Ltd., dated 10/5/43, was marked Plaintiff's Exhibit 105 for identification.)

(Whereupon, copy of letter from Continental Ore to Electro Metallurgical Company of Canada, Ltd., dated 10/27/43, was marked Plaintiff's Exhibit 106 for identification.)

(Whereupon, copy of letter from Electro Metallurgical Company of Canada, Ltd., to Continental Ore Company, dated 10/30/43, was marked Plaintiff's Exhibit 107 for identification.) [881]

(Whereupon, copy of letter from Continental Ore to Electro Metallurgical Company of Canada, Ltd., dated 2/2/44, was marked Plaintiff's Exhibit 108 for identification.)

(Whereupon, memorandum of Mr. Wolf, dated 6/11/43, was marked Plaintiff's Exhibit 109 for identification.)

Mr. Alioto: Now, if your Honor please, in addition to the decision of Judge Hutchinson of the Fifth Circuit, there are a number of other decisions holding that Governmental power may be used or Governmental agency may be used for the purpose of furthering monopoly or conspiracy to restrain.

I take it that your Honor does not want me to present those cases in an argument in connection with this offer?

The Court: Let the appellate court look at those.

Mr. Archer: In connection with this last exhibit, Mr. Arrouet didn't write this. Mr. Wolf wrote it.

Mr. Alioto: I pointed out that the witness made a memorandum of his conversation with Mr. Arrouet and recorded that conversation at or about the time it was had with Mr. Arrouet.

Mr. Holland: You just add that to your other offer of proof, is that it?

Mr. Alioto: I offered the memorandum, yes, as part of the documents.

Mr. Holland: I mean, it has already been ruled upon?

Mr. Alioto: Yes, the Court has ruled after that document was offered. The last document, the Court has ruled, is excluded as well.

The Court: That goes into the Canadian matter.

Mr. Alioto: Yes.

Now, I understand—I don't want the Court to ever think I am being disrespectful or discourteous. I am going to inquire—I like tough-minded judges myself, your Honor—I like tough-minded people—but I am going to inquire this afternoon about the Arrouet conversation and as it relates to anything in America.

Now, I don't know how the witness can give part of the conversation without giving the setting for it, but we will do the best we can, Judge.

The Court: That's the trouble, you know; there's too much setting.

Mr. Alioto: Well, this is a very simple one—

The Court: ——letting all these other things in.

You might ask him if he had a conversation with Mr. Arrouet, and he would be permitted to state what that conversation was, except as it referred to Canada.

Mr. Alioto: Well, it might be very much, if your Honor please, like having a discussion on Hamlet without mentioning the Prince of Denmark. We'll do the best we can, Judge.

The Court: We will recess until 2:00 o'clock.
(Recess until 2:00 o'clock p.m.)

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June 10, 1958, 2:00 o'clock p.m.

(The Jury resumed their places in the box, the witness, Mr. Wolf, resumed the stand, and the following occurred in the presence of all parties:)

MARTIN WOLF,

a witness called by and on behalf of the Plaintiffs, having been previously duly sworn, resumed the stand and testified further as follows:

Direct Examination—(Continued)

Q. (By Mr. Alioto): This morning we were speaking of the type of ferro-vanadium manufactured by the Apex Smelting Company under its joint venture with Continental Ore, and the content, particularly of that ferro-vanadium as compared to what the other two manufacturers in the industry were doing.

Now, then, you had a product called Van-Ex, did you not? A. Yes.

- Q. Would you be good enough to state generally what that product consisted of?
- A. Van-Ex is mainly a vanadium oxide, and it is an exothermic vanadium oxide, meaning that it has certain properties which make it self-reducing. Self-reducing, in turn, means that you reduce the oxide to a metal in the process of [884] adding it to the steel where you want it ultimately to be.
- Q. Was that product marketed by the Continental Ore Company during the time that you were with the Continental Ore Company?
 - A. It was.